Make Defender driving more of a Pleasure...



The Red Booster servo clutch kit makes your Defenders clutch much easier to press. This kit will make your driving a more pleasurable experience and reduce the effort you'd normally put in from driving your Defender. No more painful knees or feet when you are stuck in slow moving traffic!

REDBOOSTER

Designed, engineered and manufactured to the highest standards, Red Booster is a mechanism system that makes it possible for all Defenders to have a servo assisted clutch. Working in a similar way to the braking system with a servo assisted system, it is mounted between the pedal and master cylinder and uses a vacuum from the inlet manifold to reduce the amount of pressure needed on the pedal to operate the clutch.

The left hand drive version - works similar to the right hand drive system. The location of the clutch pedal of a left hand drive Defender is on the far corner of the vehicle and with hardly any space the entire unit had to be redesigned to fit without cutting and drilling your vehicle.

See it in action at
www.britpart.com/red

Right Hand Drive Vehicles

DA1683	Defender - 2007 onwards
DA1684	Defender - Td5
DA1685	Defender - 300Tdi
DA1686	Defender - 200Tdi

Left Hand Drive Vehicles

DA1687	Defender - 2007 onwards
DA1688	Defender - Td5
DA1655 NEW	Defender - 200Tdi & 300Tdi

> ***"The next best thing to having an automatic when crawling along"***
> John Pearson – LRO editor-in-chief

DA1683



DA1684



DA1685



DA1686



DA1687



DA1688



Part numbers are used for identification purposes only and do not imply or indicate the identity of the manufacturer. E&OE. Products available from your local Britpart stockist.

BRITPART

The quality parts for Land Rovers

www.britpart.com

To find your nearest stockist
www.britpart.com/distributors

24 month Guarantee BRITPART

SPECIAL ISSUE: CELEBRATING RANGE ROVER'S 50th

LAND ROVER MONTHLY

LRM



YORKSHIRE DALES
9 must-do greenlanes

DRIVE • MODIFY • MAINTAIN • EXPLORE • BUY

COOL CLASSIC

4 awesome Range Rovers you need in your life



PLUS

Craziest conversions ever!

EXCLUSIVE: How to make a Defender Euro 6 compliant



Slovak spectacular
Factory secrets revealed



Workhorse to thoroughbred
Stylish V8-powered Defender



Tricked-up Series III
Sharper, faster, more fun

9 771463 120116 04
LRM April 2020 £4.60



Choose your own adventure with Front Runner Outfitters' roof racks and rack accessories. Built off-road tough with unmatched strength and functionality - you take the journey, we'll bring the gear.

www.FrontRunnerOutfitters.com

ROOF RACKS | ACCESSORIES | CAMPING GEAR

FRONT RUNNER



COVER: Range Rover Classic
PICTURE: Alisdair Cusick

SUBSCRIBE TO LRM TODAY

and receive a FREE gift with every order – see page 78

Subs and customer services: Get your magazine delivered through your door every month
UK and International
Tel: +44 (0)1778 392033
Email: subscriptions@warnersgroup.co.uk
mymagazinesub.co.uk/land-rover

Where to buy LRM
LRM is available at all good newsagents and supermarkets, but quickly sells out. Why not ask your newsagent to reserve your copy? If you still have difficulty obtaining a copy of **LRM**, phone 01778 391171

How to advertise
Contact our Advertising Manager Steve Miller
Tel: 01778 391106 or 07586 023248
Email: stevemiller@lrm.co.uk

Tell us about your new product
We're eager to hear about new products – and so are our readers. Tell us about them

Show us your Land Rover
Want to see your Land Rover featured in **LRM**?
Email: patrick@lrm.co.uk

Tell us about your event or news
Our readers want to know what's going on. Share it with them in **LRM**

Technical queries
Pick the brains of **LRM**'s technical experts

Letters to the Editor
Tell us what you think about **LRM** and the world in general

Our contact details
Warners Group Publications, The Maltings, West Street, Bourne, Lincolnshire, PE10 9PH
Tel: 01778 391000
Fax: 01778 392422
Email: editorial@lrm.co.uk

WELCOME

@LRMonthly facebook.com/LandRoverMonthly



Happy 50th Birthday!



WELL, what an honour to have been invited to be Guest Editor of LRM for a month! It's been great fun and I now have a much more intensive appreciation and understanding of all the hard work and dedication the team puts in every month to bring to you the world's best Land Rover magazine!

To be honest, when our esteemed Ed first asked me if I'd be up for it I didn't think he was being serious, so I asked him 'Why me?'. The answer was that he wanted this issue to celebrate the launch of the original Range Rover 50 years ago and, as the mag's resident classic Range Rover nut, it made sense for me to be the Guest Editor. I'm looking forward to doing it again in 2070 when we'll be celebrating the 100th birthday!

In this month's LRM you'll find Nick Dimbleby reliving his childhood days in his article on Range Rover Conversions. You'll need to be my sort of age to remember Nick's wonderful book by the same name, first published way back in 1987 when he was just 13 years old. His Range Rover love affair started even earlier than mine!

You'll also have noticed the beautiful classic on the cover this month. It was one of several that came together for a spot of off-roading at Land Rover Experience London, including my 300Tdi smoker. It was a great day out with some truly dedicated and passionate owners and their vehicles, and you can read all about it on page 42.

And obviously it made sense to dedicate this month's Land Rover Legends article to the people that conceptualised, designed, engineered and launched this ground-breaking vehicle. Looking back, it is truly remarkable just how small the team was that took the vehicle from idea to production, and in the process changed the course of automotive history. Things were certainly simpler back then, but of course they didn't have to contend with all the electrickery!

I'm really looking forward to the 50th anniversary year and there are certain to be Range Rover celebrations of all shapes and sizes at events up and down the country. I'll be going to as many as I can.

Gary Pusey, **Guest Editor**



Thom Westcott
Thom finds a new mechanic for her beloved Lightweight, p29



Dave Phillips
Dave uncovers a very special SIII that has us green with envy, p72



Nick Dimbleby
Discover some of the most unusual Range Rover conversions, p80

LAND ROVER LRM MONTHLY

ISSUE 267 APRIL 2020

CONTENTS

42 50 years of Range Rover
Four very different stories all linked by a single passion — a deep-rooted love for Range Rovers

52 Wonderful Wensleydale
When in comes to scenery nothing beats a a day of greenlaning in the Yorkshire Dales

62 Slovak spectacular
An exclusive tour of JLR's newest producton facility in Nitra, home to new Defender

72 Series-ly Tdi!
This Series III's gleaming bodywork hides a 300Tdi, R380 gearbox, PAS and disc brakes

80 A car for all reasons
Is the Range Rover the most converted car of all time? Nick Dimbleby delves into his archive

88 Out of Africa
Battered jungle workhorse from Uganda is transformed after getting the Rivolve treatment

96 Land Rover Legends
The remarkable people who took the Range Rover to new levels of power and desirability

104 Land Rover TReK 2020
Eight teams from the US and Canada compete in new Defender for the title of TReK 2020







REGULARS

08 NEWS
12 LETTERS
16 YOUR PICTURES
20 PRODUCTS
25 DAVE PHILLIPS
27 GARY PUSEY
29 THOM WESTCOTT
31 JACK DOBSON
34 DUNSFOLD DIARIES
36 NORFOLK GARAGE
78 SUBSCRIPTIONS
112 WHAT'S ON
127 TECH SECTION
150 PRICE CHECK
156 LAND ROVERS FOR SALE
161 CARTOON
162 WORK IN PROGRESS



p42 **50 years of Range Rover**



HOW TO ...

127 Ed Evans
Off-roading: the right way and the wrong way to do it

128 Inspection & rebuilding
Check out part 2 of our step-by-step guide to Disco Td5 cylinder head removal

134 Discovery 3 sill repair
With underfloor and sill rot to rival the Discovery 1 here's how to sort it

140 Product test
Why you need an auto-darkening welding mask – and which is the best

146 Defender E6 conversion
Make your Defender TDCi Euro 6 compliant and emission zone friendly

p134 **D3 sill repair**



| tmdtuning.com | | tmdtuning.com | | tmdtuning.com | | tmdtuning.com |

tmdtuning.com

5% Off too LRM Readers
Coupon Code lrm5

Exclusions Apply Valid until 30/04

Gold Trusted Service Award 2019 feefo

NEW BILLET ITEMS

Our Highest quality billet items to date.

- Each Item is manufactured from 60-82 Aircraft grade billet aluminium.
- Once machined each item is then polished.
- Once polished each item is bright anodised.
- Once bright anodised the items are then black anodised.
- Each product has a gloss black mirror image finish.

Defender 90 Front Security Door Hinges £395



Defender 110 Front & Mid Security door hinges £790



Defender 90/110 Security rear door hinges £295



Security Bonnet Hinges £114



Windscreen Blocks £114



TMD BILLET LED NUMBER PLATE LIGHT

Machined from a single billet of aluminium
Polished & anodised for a Superior finish

£90







TMD BILLET STEERING WHEEL

£695



- Machined from a single billet of aluminium
- Polished and then anodised in Black or Silver
- Trimmed in Black Nappa Leather

BILLET WING MIRRORS

Billet wing mirrors
includes amrs & heads

£570 / PAIR



NEW BILLET FUEL CAP



£95

DEFENDER SHORT SHIFT (SHIFT-RV2)



- Shorter Gear Changes
- Smoother Gear Changes
- Reduced Vibrations Easy to Install – 4 Bolt Fitment

The Key differences between this and the last version is the manufacturing process.

- The shaft is machined from a single billet
- The Gear stick will now sit in a more original position
- Sitting in the Original position it will suit both right hand drive and left hand drive users far more



Comes complete and ready to install only item needed from the original stick is the gaiter at the bottom.

- Fits Both RHD & LHD Models
- Far more pleasurable driving experienc
- Fit with all gear stick assemblies from original to aftermarket



£225

All upgrades available to buy online 24/7 – We ship worldwide

Call us on 01825 841148 – Email us info@tmdtuning.com

All prices include vat @ 20%

| tmdtuning.com | | tmdtuning.com | | tmdtuning.com | | tmdtuning.com |

LIGHTING



Vision X Vortex Headlights

4210 Lumens per lamp
Available in RHD & LHD.
Supplied with
High Low looms

£690





Vision-X Headlights
New Matt Black

RED BOOSTER

Servo Clutch kit
Makes pedal very
easy to depress

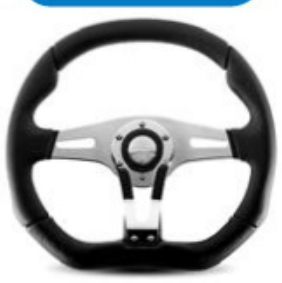
PRICE
FROM £444



MOMO STEERING WHEELS

Momo Trek R

£190



£208

Momo Jet



Momo Dark
Fighter

£132



£225

Momo Quark



Momo Heritage
California

£294



£215



Momo Heritage
Prototipo

EBC BRAKES



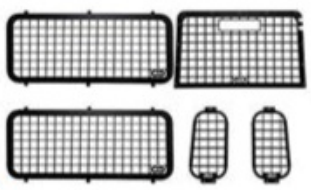
Discs from £100.73
Pads from £13.62

STAINLESS STEEL BOLT KITS



• 90 Doors (2) £12.91 • 110 Doors (4) £31.97 • Rear Door £13.61 • Member to Tub £11.20

WINDOW GUARD KITS



Window
Guard Kits
From
£186.68

EXTENDED WHEEL ARCHES



Give an Original look
4 Arches £206.02

XS INTERIOR ITEMS



XS High top Cubby Box £95
XS Dash Trims £450

TMD CLASSIC GRILLES & VENTS



£199

Zunsport
Centre Grille



£46,67

Zunsport
Lower Grille



£162

Zunsport Wing Tops&
Side Vent set (3)



£225

Classic Light Surrounds

All upgrades available to buy online 24/7 – We ship worldwide

Call us on 01825 841148 – Email us info@tmdtuning.com

All prices include vat @ 20%



Jaguar Land Rover to cut 500 jobs

Is investment in electric cars to blame for JLR slashing jobs?

JLR is going to cut about 10 per cent (500 posts) of its workforce at its Halewood plant near Liverpool, as it moves from a round-the-clock three shift pattern to two, under an agreement that allows it to extend some workdays to accommodate extra demand.

According to Bloomberg, the reason for the reductions is "to cut costs amid mounting spending on electric cars". On the other hand, Tata Motors (JLR parent company) explains that "it is about efficiency, not loss of volume", and that the change was agreed as part of pay negotiations last year and that it will seek voluntary departures.

Almost a year ago we reported that JLR had planned to cut 4500 jobs worldwide as it struggled with a sales slowdown caused by reducing demand for diesel vehicles, a downturn in China and uncertainty around Brexit.

Having already moved production of the Land Rover Discovery to Slovakia from Solihull in Birmingham to make room for future electric cars at a cost of 1200 jobs, Tata has since said it's open to finding partners for JLR to share the burden of investing in electric vehicles. When leading electric vehicle consumer website DiscoverEV.co.uk asked JLR's PR department if it had anything to offer in the way of JLR's electrification strategy, they were told "no" and to "please stand by".

With the Government recently announcing Britain will ban sales of new gas and diesel cars from 2035 (including hybrid vehicles) — it will certainly heap pressure on JLR and the auto industry as a whole – especially given car production sank to its lowest in almost a decade in 2019, with output forecast to continue falling this year. It will be interesting to see how quickly JLR can move – after all environmental pressures are only going to increase.

Prof Ralph Speth to step down



PROF Sir Ralf Speth has decided to retire from his current role as Executive Director and Chief Executive Officer of Jaguar Land Rover at the end of his contract term in September 2020. He has however agreed to maintain his relationship with JLR by becoming non-executive Vice Chairman, and will also remain on the board of Tata Sons.

Speth has overseen a remarkable turnaround of the business, with increased sales, over 8000 jobs created and high-profile launches, and much of this success is attributed to his insistence on a design focus in every aspect of the company's approach. "I'm talking about how we design all our processes, how we design the research and manufacturing, how we design the training, the recruitment plans, the personal skills. And how we design our relationships with dealers and ultimately with our customers."

Following a degree in Economics Engineering from Rosenheim University, Germany, he earned a Doctorate of Engineering. He is also an Industrial Professor at the University of Warwick.

Dr Speth worked as a business consultant for a number of years before joining BMW in 1980. After 20 years, he moved to Ford Motor Company's Premier Automotive Group as Director of Production, Quality and Product Planning. His last job at BMW was Vice President of Land Rover when BMW owned the brand.

He then became director of production, quality and planning for Ford's Premier Automotive Group (PAG) when BMW sold Land Rover to Ford in 2000. He was Head of Global Operations at the German international industrial gases and engineering company Linde Group, before moving to JLR.

Speth went on to say: "I feel very honoured to have worked with so many dedicated and creative people. We have elevated Jaguar and Land Rover. I want to say thank you for all their support and commitment."



Cheshire Police tackling Defender thefts

CHESHIRE'S police force has launched a new scheme aiming to deter criminals from stealing Land Rover Defenders, and it's doing it with stickers! Yep, we're dubious too. The area's Rural Crime Team has been handing out stickers, which feature the wording 'Police Stop Me', asking owners to place them in the back window. These stickers are designed to prompt officers to stop the vehicle to make sure the rightful owner is sitting behind the wheel – but officers will also be stopping Defenders which aren't sporting them.

Sergeant Rob Simpson told Warrington Guardian: "In line with the national picture, we are seeing an increase in Defenders being stolen due to their continuing popularity.

"Defenders are the workhorses of farms or are the well-loved part of the family character vehicle, with pet names such as Dave – so when they are stolen it can be devastating for their owners emotionally and, if used for work, financially.

"That's why we want to make life as difficult as possible for criminals by stopping Defenders any time and day, even if the vehicle hasn't got a sticker."

Obviously visual aids means better policing. Perhaps if Teresa May hadn't cut the number of officers we wouldn't need stickers to help save Dave and the likes?

Residents in Cheshire can pick up a sticker at their local police station and can report suspicious activity by calling 101 or by visiting cheshire.police.uk.



Jaguar Land Rover profit increases to £318 million in third quarter of 2019/2020 financial year

JLR has reported financial results for the three-month period ending December 31 2019, and things are looking good. Revenues increased to £6.4 billion, up 2.8 per cent year-on-year, and while total retail sales fell 2.3 per cent, sales in China continued to recover (up 24.3 per cent) and sales in North America increased by 1.1 per cent.

The improvement reflected a combination of the higher China volume, stronger product mix (specifically the Range Rover Evoque and refreshed Discovery Sport), lower operating costs (including the Project Charge transformation programme) and favourable foreign exchange.

Despite the many challenges presently facing the industry, Jaguar Land Rover has continued to expect improved profitability and cash flow for the financial year ending 31 March 2020 with an EBIT margin of around 3 per cent, however, the developing situation with the coronavirus could have some impact on this.

Prof Sir Ralf Speth said: "Our improving financial results and the cost and cash flow achievements of Project Charge will support the next phase of our pipeline of exciting new vehicles and technologies, with a choice of outstanding electrified, petrol and diesel powertrains. This combined success is enabling us to lay the foundations for long-term growth as we move purposefully towards Destination Zero – our mission to shape future mobility with zero emissions, zero accidents and zero congestion."

Double celebration for Midland 4x4 Response team

MIDLAND Rover Owners Club 4x4 Response, a section of the long established MROC, has been awarded a grant from the National Lottery Community Fund which has coincided with them celebrating 12 years of supporting local communities in the West Midlands.

The cash boost will be used towards provision of new two-way radio equipment to significantly improve communications to all volunteer drivers when on duty. Not only is the award welcome as the group hugely relies on the generosity of others and will obviously benefit the whole team by offering them a more secure and safer working environment, but it might serve to offer other organisations who boast similar services encouragement to apply for funding, too.



Land Rover reveals new partnership with Keswick Mountain Festival

LAND Rover has joined forces with Keswick Mountain Festival (KMF) to become title partner of one of the UK's best-loved outdoor festivals. The KMF attracts around 20,000 visitors to Cumbria each year, offering a unique mix of live entertainment, sporting events, outdoor adventures, high profile speakers, taster activities, exhibitor stands and camping for all of the family.

Thanks to support from Land Rover, facilities and activities on the site will be even more extensive in 2020. As part of a major new attraction, festival-goers will be able to test drive the new Defender across a challenging off-road course or get up close to the new car on Land Rover's stand.

The heart of KMF will be the Festival Village in Crow Park – with the backdrop of Derwentwater and the Lake District fells – which will be free to enter during the day and open to ticket holders on the Friday and Saturday evenings. Among those appearing on the main stage in Crow Park at the 2020 Keswick Mountain Festival will be Space, Holy Moly & The Crackers, SWJ Group, Huey Morgan, and award-winning filmmaker Terry Abraham with a screening of Life of a Mountain: Helvellyn. For every ticket sold for Friday night at KMF, £1 will be donated to charity, with the money raised to be split between the National Trust, Friends of the Lake District and MIND.

KMF takes place from 15-17 May and should offer something very different from your usual Land Rover show. For more details and to buy tickets go to: keswickmountainfestival.co.uk.



VEHICLE INTERIORS AS INDIVIDUAL AS YOU ARE

0116 277 3701

bespoke@ruskindesign.co.uk

www.ruskindesign.co.uk

GUARANTEED RUSKIN INSIDE®

A MEMBER OF ACID ANTI COPYING IN DESIGN

Astwood 4x4 Ltd

The Land Rover Specialists

Specialists in Defenders, Series Land Rovers
Over 30 years experience in the field Restoring,
Rebuilding & Modifying the classic British ICON

Offering Professional Advice & Bespoke Craftsmanship
MOT's, Servicing, Chassis Changes, Engine Upgrades, Body work



We welcome you to come & take a look around & meet the Team
Astwood Bank, Astwood Business Park, Astwood Lane, Redditch. B96 6HH

www.astwood4x4.co.uk
Email: info@astwood4x4.co.uk

Follow us on:
Astwood4x4

RIMMER BROS EST 1982

A BRITISH COMPANY SUPPORTING BRITISH CARS

ALL THE LAND ROVER PARTS YOU NEED

ORIGINAL, OEM & AFTERMARKET
PARTS & ACCESSORIES
1948 TO PRESENT DAY

Trust us to deliver...**Worldwide.**
Millions of parts in stock.





ASK FOR A FREE CATALOGUE

Parts service also available for Triumph, MG, Rover, Mini & Jaguar '96 on.

TRIUMPH MG ROVER MINI JAGUAR *from 1996*

www.rimmerbros.com

Triumph House, Sleaford Road, Bracebridge Heath, Lincoln, LN4 2NA. England
Telephone: 01522 568000 | Fax: 01522 567600 | E-mail: lrsales@rimmerbros.com
LINES OPEN 20/7

LETTERS

THE OFFICE

Where we are:
Warners Group Publications,
The Maltings, West Street,
Bourne, Lincolnshire, PE10 9PH
Tel: 01778 391000
Fax: 01778 392422
Email: editorial@lrm.co.uk

The editorial team:
Editor Patrick Cruywagen
Art Editor Sam McMurray
Technical Editor Ed Evans
Sub Editors Louise Woodhams, Dave Phillips

Regular contributors:
Louise Woodhams, Dave Phillips, Richard Hall, Philip Bashall, Trevor Cuthbert, Gary Pusey, Steve Miller, Dave Barker, Thom Westcott, Jack Dobson, Ian West, Mark Dixon, Gary Stretton, Ali Cole, Aldri van Jaarsveld, Alisdair Cusick, Tim Hammond, Bob Weir

The support team:
Publisher
John Greenwood
01778 391116
johng@warnersgroup.co.uk

Marketing/Brand Manager,
Lucie Cox
01778 395016

Advertising Production/ Design
01778 395075
Kate Goulding, kate.goulding@warnersgroup.co.uk,
Viv Lane,
viv.lane@warnersgroup.co.uk

Accounts
01778 391000

Distribution
Warners Group Distribution
01778 391171

Reader contributions:
We welcome any correspondence and feedback from readers, email patrick@lrm.co.uk

Advertising:
Advertising Manager Steve Miller
Tel: +44 01778 391106 or
07586 023248
stevemiller@lrm.co.uk

To sell your Land Rover for free in LRM:
Email: classifieds@lrm.co.uk

To subscribe:
UK and International
01778 392033
email: subscriptions@warnersgroup.co.uk
Visit: mymagazinesub.co.uk
UK subscription £42, Europe £65, Rest of World £70

Land Rover Monthly is published every four weeks by Warners Group Publications Ltd. All rights in the licensed material belong to Warners Group and may not be reproduced, whether in whole or in part, without their prior written consent.

Printed by Warners Midlands.

Lightweight affair

I am referring to Thom Westcott's article about her Land Rover date (March LRM).

In the end she stated her Lightweight is better suited for romance and I can confirm this.

It wasn't my first date but I think the fourth or so when I took my girl out in my Defender.

We had an enjoyable a drive around. Then, when I delivered her back home, I opened the door from outside like a real gentleman, then grabbed the opportunity by its ears and kissed my love as she was at the same height sitting as me standing outside.

It was just another romance supported by Land Rover, but it would be nice to see this published in the Letters section please.

Stefan Heck, Cambridge

And they say romance is dead! St Valentine's Day has gone, but what the heck. Don't you agree, Mr Heck? – Ed.

And now the good news ...

I read Dave Phillips' column in the March 2020 edition with a sense of weary disappointment. I get LRM because I love Land Rovers. I had no idea what Mr Phillips' opinion on Brexit was until now. I have no idea what proportion of LRM readers share his views and don't care as it is irrelevant to our shared enthusiasm. LRM should be apolitical rather than advance opinions on the most divisive issue in this country since the Civil War.

He justifies his views by saying that "being a member of the Common Market" (sic) ... decimated the British car industry". He suggests that many British car manufacturers disappeared as a consequence of being in the EU with "its frictionless trade". He produces no evidence to support this and seems unable to distinguish between cause and correlation. British Leyland, the byword for quality car design and manufacture, was formed just before the UK joined the EEC. It was then given a greatly expanded marketplace to sell its vehicles. Unfortunately it seemed that the "will of the people",



DAVE PHILLIPS

The Vocal Yokel

When Britain ruled the world

REGULAR readers will know that I'm no fan of politicians of any persuasion, but I have to admit I have a sneaking admiration for our Prime Minister, Boris Johnson. Not because I agree with his politics, and certainly not because I approve of yet another privileged, Eton-educated toff getting the top job, but because he caught the mood of the British public.

In 2016, the majority of folk who bothered to turn out for the referendum voted to leave the EU. As we all know, the majority of MPs were in favour of remaining – and for over three years couldn't bring themselves to carry out the wishes of the British public. Their failure to do so was political suicide.

Boris, for all his faults (and they are many), detected the mood of the British people and acted accordingly. Ever the opportunist, he spotted a gap in the market for a leader prepared to carry out the voters' wishes. They rewarded him lavishly at the December election.

Thanks to the handsome majority he won in the Commons, we are leaving Europe. Now it's settled, all is mainly quiet on the Brexit front, although motor industry spokesman Mike Hawes has been a bit vociferous.

I have a lot of time for Mr Hawes, who is chief executive of the Society of Motor Manufacturers and Traders, whose stance on most issues I broadly agree with. But his political antennae aren't in the same class as Boris Johnson's.

Johnson has stated that he will seek the best possible trade deal for the UK with Europe, but will not rule out a no-deal exit. No surprises there: as any negotiator knows, to rule out any possibility is to weaken your own bargaining hand, but the SMMT sees the prospect of a no-deal Brexit as the worst possible outcome for manufacturers like Jaguar Land Rover.

In a press statement issued in December, Mr Hawes said: "European Automotive is deeply integrated and the benefits of free and frictionless trade have helped our sector become one of Europe's most valuable assets, delivering billions to economies and supporting millions of livelihoods across the EU.

"A 'no deal' Brexit would have an immediate and devastating impact on the industry, undermining competitiveness and causing irreversible and severe damage. UK and EU negotiators have a responsibility to work together to agree a deal or risk destroying this vital pillar of our economies."

The way he talks, you'd be forgiven for thinking that EU membership has brought about some kind of golden era for the British motor industry. And that's a

"It wasn't just being a member of the Common Market that decimated the British car industry. Poor product development, weak management and out-of-control unions were to blame"

surprise, because he certainly has easy access to the facts and figures that show just how disastrously our native automotive manufacturing has fared during membership of the single market.

The British Parliament voted to join the EU (then called the Common Market) in 1972 and membership came into effect on January 1, 1973. The previous year UK car production had peaked at an all-time high of 1.92 million vehicles. Over half a million people were directly employed in the car industry in this country.

After 1973, the British car industry steadily declined, hitting an all-time low of 888,000 in 1982. Japanese manufacturer Nissan opened a factory in Sunderland in 1986, halting that decline. Today it is Britain's biggest car maker.

According to the SMMT's own figures, today just 168,000 people are directly employed in the UK automotive industry.

During our membership of the EU, many famous marques that were once household names have disappeared. Names like Morris, Austin, Wolseley, Humber, Hillman, Sunbeam, Triumph, Jensen, Reliant, Singer, TVR – and of course Rover. Some of them aren't actually dead. The rights to the Rover name, for example, are owned by Tata Motors, but the likelihood of Rover saloons once again being the pride of Solihull's production lines is pretty negligible.

So is being a member of the EU with its "frictionless trade" essential to car manufacturing? The world's biggest car manufacturing nations, China (27,800,000 cars in 2018), USA (11, 315,000), Japan (9,729,000) and India (5,175,000) would say no.

Germany (5,120,000) and France (2,270,000) were the only EU members in the world's top ten, according to figures for 2018 (the latest available). The UK, incidentally, produced a mere 1,604,328 cars that year, trailing in 14th place. In 1972 it was the world's fifth-biggest.

It wasn't just being a paid-up member of the Common Market that decimated the British car industry. Poor product development, weak management and out-of-control unions (in that order) were largely to blame. But EU membership did nothing to help – in fact the "frictionless" import of German, French, Italian and Swedish cars did much to hasten our car makers' demise.

The election result suggests that most Britons believe in Britain's ability to thrive outside the EU. Sadly, it appears JLR doesn't share their confidence, building a factory in Slovenia to build Defenders and Discoverys, which I and many others consider deplorable.

Will Boris lead us to the sunlit uplands of national recovery? Probably not, but at least he's capable of capturing the national mood. It's clear that JLR isn't.

■ Ex-LRM Editor Dave has driven Land Rovers in most corners of the world, but loves the British countryside best



Nothing Bland about Joanna's Disco 2

I was really heartened to read your story about young Joanna Bland and the excellent job she did of transforming a rather dull and disreputable Discovery 2 into a real head-turning off-road and greenlaning machine.

To me, this demonstrates that the Land Rover movement isn't all about middle-aged men with beards tinkering with oily old Land Rovers. It really is a family affair, which everyone can enjoy.

Keep up the good work, LRM.

Sandra Middleton
Bristol

both here and on the continent, was to choose Audi over Austin and Saab rather than Singer.

The world has moved on since 1972. It may give Mr Phillips a wonderfully nostalgic feeling to think of the world 50 years ago, but it does not mean that the clock can be turned back. He may hark back to when British Leyland were (sporadically) turning out their handcrafted leaf-sprung Land Rovers and cutting-edge Austin Princesses but he shouldn't kid himself that anyone would want to buy them now. I am more comfortable working on my 20th century Defender than my 21st century Range Rover Sport. However guess which I choose to use for the 30,000 business miles that I drive a year?

JLR is now an international company with a British origin. In common with other international companies it wants to make a profit by selling a product which people want to buy. Despite its iconic status it could not do that with the old Defender. If it is more efficient to make the new Defender in Slovenia that is a commercial decision. If frictionless trade in the EU makes modern car manufacture easier and more profitable then it is unsurprising that the chief executive of the SMMT is concerned about the prospect of 'no deal' by the end of this year. Forgive me if I attach more weight to Mr Hawes' opinion than that of your columnist.

Mr Phillips proclaims that he is a 'yokel'. Dictionary definitions of 'yokel' vary from 'unsophisticated', 'naive and gullible', 'uneducated' to 'stupid and awkward'. He has certainly lived up to his title this month. Please tell him to write about what he knows about, namely sharing his experiences and love of Land Rovers with fellow fans in an entertaining and informative way. Otherwise, just leave that page blank so I can do Land Rover doodles on it.

Neil Hinton

As a writer, I merely reflect the world as I see it. While feedback to my ramblings is always welcome, it helps if you actually bother to read what I write before exploding into apoplectic rage. For the record, I have never aligned myself with any political party, nor revealed my voting intentions at any election or referendum. The principle of the secret ballot is sacrosanct to me. In the very first sentence of the article you're so offended by, I wrote (and I quote): "Regular readers will know that I'm no fan of any politicians of any persuasion".

You then try to be all clever by adding '(sic)' to my reference to the 'Common Market', suggesting that it was incorrect. In fact 'Common Market' is what we all called the European Economic Community back in the day. Wikipedia agrees: "The European Economic Community is sometimes referred to as the 'Common Market', a regional organisation from 1958 to 1993".

In that same sentence you deliberately misquote me. In fact I said (and again I quote): "It *wasn't* just being a paid-up member of the Common Market that decimated the British car industry. Poor product development, weak management and out-of-control unions (in that order) were largely to blame." You can hardly claim you misread it, as it was repeated in huge blue letters for the pull-quote in the middle of the page.

You are even disingenuous about the tongue-in-cheek 'Vocal Yokel' tagline at the top of the page. Dictionary definitions of 'yokel' also include 'a person who lives in the country' and 'a person whose views are simple and unsophisticated'. I use it in a self-deprecating manner, because I come from Norfolk, live in the countryside and don't take myself too seriously. But nor do I suffer fools gladly, Mr Hinton.

I could go on, but I'm getting bored – and I expect most readers feel the same way. But I should also point out that both Mr Hinton and myself made the mistake of confusing Slovenia with Slovakia. None of us are perfect.

My article was an expression of my relief that Brexit was finally over. Personally, I wasn't too bothered whether we left or remained, but I was fed up with hearing the same old vitriol between the shouty folk from both sides who were twisting the facts to suit their tedious arguments.

Does that sound familiar to you, Mr Hinton? — Dave Phillips.



It's the Real Billing!

SO glad to see that LRM has decided to back the Real Billing. The Arrowsmiths have done a wonderful job of putting on a great show with a brilliant atmosphere and incomparable off-road course for the past few years.

I was horrified when I heard that another promoter had decided to stage a rival show the same weekend, on the other side of the river.

I suppose it is a free country, but I was decidedly unimpressed and I urge all true Land Rover fans to join us at the best family-friendly Land Rover show on the calendar. It is a weekend to look forward to — and if you've never taken your Land Rover off-road before, this is the place to do it.

James Tate
Bradford

You can find out more at billingoffroadshow.co.uk — Ed.



Best of British Grill set from £200 ex VAT



120% Xenon Headlight Kit
Including Crystal Lenses
From £70 ex VAT



JW Speaker EVO2 7" Headlight Kit
From £625 ex VAT



Nolden 7" Bi-LED Headlight Kit (pair)
From £625 ex VAT



URBAN Truck 10 way
WIPAC LED light kit
£175 ex VAT



URBAN Truck Crosswire Grill / Side Vents from £300 ex VAT



DRL Bumper End Caps
£30.00 Ex VAT



URBAN Truck Wing
Mirror Finisher Covers
£65 ex VAT



18" Cruiser Alloy Wheel
By URBAN Truck
From £344 Ex VAT- Per Wheel



18" Modular Steel Wheel
By URBAN Truck
From £290 ex VAT- Per Wheel



URBAN Truck Spare
Wheel Cover
£100 ex VAT



URBAN Truck 30mm
Wheel Spacer Set
£165 ex VAT



URBAN Ultimate Suspension and handling pack
From £1,449 ex VAT





Black Shadow
Side Step
£190 ex VAT



Full Colour change from a large
pallet of colours available-
Prices from £8,000 ex VAT

Use Code

LRM10

For 10% off your whole
order on our webstore

www.urban-automotive.co.uk

www.houseofurban.co.uk



Genuine LR Defender
Tow ball
£25 ex Vat



URBAN Truck
Billet Aluminium
Gearstick Set
£303 ex Vat



URBAN Truck
Defender Slimline
Steering Boss
£72 ex VAT





MONZA Steering Wheel by
URBAN Truck
Prices from £549 ex VAT



Leather Trimmed Dashtops
and grab handle
Prices from £275 ex VAT





RECARO Cross Sportster
CS (Pair)
Prices from £2,150 ex VAT



MONACO Steering Wheel by
URBAN Truck
Prices from £549



Premium High Top Cubby Box
Prices From £120



URBAN Truck
Defender Billet
Aluminium Fuel Cap
£75 ex Vat



Large Selection of Audio Components
Avalible on our Store
prices from £39 ex Vat







Large selection of Billet
accessories for Defender
prices from £66 ex VAT



Seat Raising and
Extending Bars
£70 ex VAT

NAS Rear Step
Prices from £390



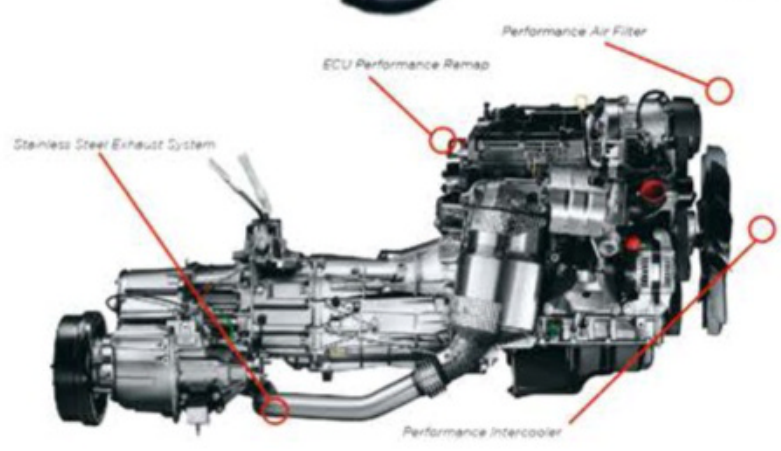
URBAN Truck Premium
Aluminium Steering Guard
Prices from £185 ex VAT



URBAN Truck Defender
Chequer Plate Kit
£240 ex VAT

MILLTEK x URBAN TRUCK
Stainless Steel
Exhaust System
Prices from £549 ex VAT







Tel:- 01908 978 978

Email: - info@urban-automotive.co.uk

YOUR PICTURES



Jack Thompson at the Hook Lighthouse, County Wexford, Ireland. His 2003 Defender 110 came along for the ride



Anthony Ashworth stopping to read his favourite mag driving in the beautiful Clarence Reserve in Kaikoura, New Zealand



Mark Taylor out laning on the Yorkshire Dales with the Discovery Owners Club



Sandy Penman and his wee 90 (as he calls it) on the Kyle of Tongue with Ben Loyal in the background; he and wife Andrea loved the North Coast 500



Paul Devonport gave us no details about this pic but we decided to publish it anyway



Julie Carter-Norris inherited this lovely 1956 86 inch Series I from her brother Paul Carter after he sadly passed away

Send us your shot

email patrick@lrm.co.uk to feature your photo in LRM



Martin Johnson and son Toby enjoying a post-Christmas Nottinghamshire laning session in their 1985 Ninety



Tom Dryden drove the groom to the church in this Wolf 90. Unfortunately, he got some oil on his cuffs from the lock



James Granger loving the Lakes in his reliable Defender 90 XS Td5



Dave Stephenson and his beloved Nellie the camper on tour in Scotland



Missing dogs: last seen driving a Defender camper in remote parts of Scotland — if found please contact Dave Stephenson

LAND ROVER SERVICE PLAN

WHEN STOPPING IS NOT AN OPTION



UNPARALLELED SERVICING YOU CAN RELY ON

All servicing is carried out by Land Rover Trained Technicians using Genuine Parts and the Land Rover Service Plan provides you with the following benefits:

Future proof pricing & flexible payment – The cost of your plan is a fixed price for the duration. Choose to spread the cost monthly or make one upfront payment.

Transferable & refundable – Sell your vehicle and the remaining balance can be transferred to a new Land Rover, or receive a full refund.

ABOVE & BEYOND



Convenience – Now available to purchase online or through your Land Rover Retailer and applicable to any age vehicle.

So wherever your journey takes you, you know you're prepared.

Search Land Rover Service Plan

PRODUCTS

ARB FLOOD LIGHT

PRICE: £440 per set
CONTACT: Island4x4.co.uk

THE AR21 Intensity LED Flood Light has been vibration tested to military specifications so good luck with trying to shake it loose on some of the worst tracks on the planet. It produces a wide and even beam which will help you deal with dark times. So, no more I did not see the kangaroo or impala please





RRC TRANSFER KNOB

PRICE: £25.80 **CONTACT:** Exmoortrim.com

IS the transfer knob on your Range Rover Classic a little worn after all the years of use and abuse? Get a black, shiny new one from Exmoor Trim. Guaranteed to give you a swift, smooth switch from high range to low range.

RRC GEAR KNOB

PRICE: £23.94
CONTACT: Exmoortrim.com

DON'T you just love the look of the embossed gear knob with white lettering on the Range Rover Classic? Also suitable for any Land Rover with the 4 speed manual LT95 gearbox.



PRO HOSE REPAIR KIT

PRICE: £167.94 **CONTACT:** connect-consumables.co.uk

DAMAGED hoses lead to leaks. If it's hard to get replacement hoses then this nifty kit will help you repair the existing one. It features a comprehensive selection of hoses and clips plus a hose cutter. So, you can remove the damaged piece and replace it with a suitable replacement piece before connecting it all up again.





SPARE WHEEL CARRIER

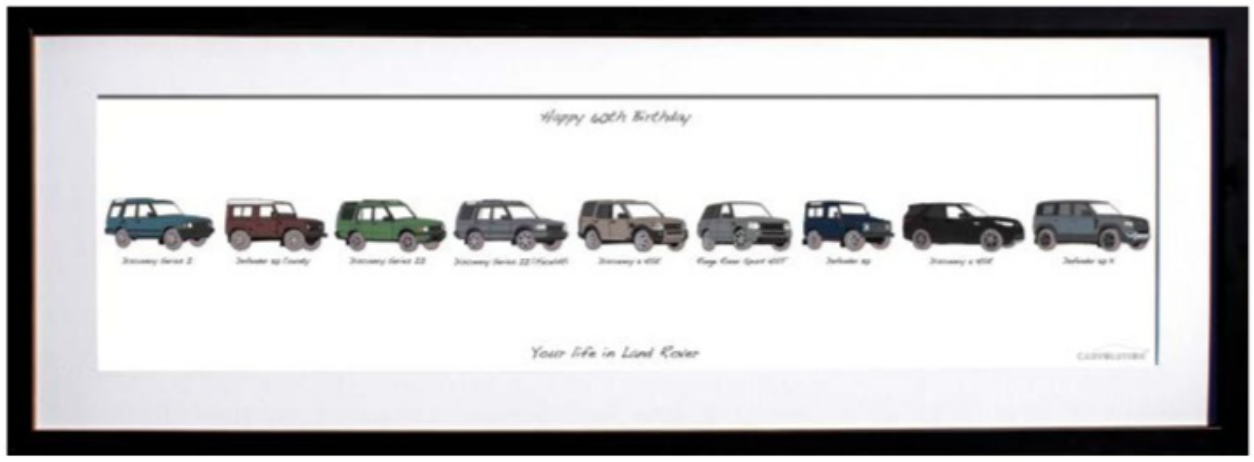
PRICE: £245.78
CONTACT: johncraddock.co.uk

THE new Terrafirma Defender spare wheel carrier is suitable for both 90 and 110 Station Wagons and hard tops built between 1985 and 2016. This black powdercoated, fabricated steel spare wheel carrier is attached to the chassis and body capping for improved load bearing. Then it's also attached to the rear door via an anti-vibration telescopic coupling assembly that allows the carrier to move automatically when the door is opened and closed. You will be able to fit it on your driveway.

YOUR LIFE IN CARS

PRICE: £95 **CONTACT:** yourlifeincars.com

WANT a picture that shows all the cars you have ever owned? Or else you can customise it and only include all the Land Rovers you have owned or liked. Your Life in Cars will help create a very personal and apt gift. Can include up to 100 vehicles.





LAND ROVER CAP

PRICE: £30 **CONTACT:** Musto.com

KEEP the rain and sun out of your eyes with this quick-drying Musto Land Rover cap. It's part of their new Above and Beyond collection.



BIG BAG

PRICE: £90 **CONTACT:** Musto.com

LAND Rover and Musto have collaborated to bring you a stunning collection of technical clothing and products. This large black 50 litre duffle bag will carry all the gear you need on your next adventure. We like the quality Land Rover YKK zips and the fact that it has a separate isolated compartment for smelly or muddy shoes.



RRC FRONT SEAT TRIM COVER KIT

PRICE: £714 **CONTACT:** Exmoortrim.com

ONE of the hardest things to find when restoring an RRC is decent front seats. Exmoor Trim have solved that problem with their Herringbone cloth Front Seat Trim Cover Kit. This cloth was used from 1972 onwards. The kit consists of two sewn cushion covers, two sewn squab covers and four palomino vinyl patches to trim the corner caps.

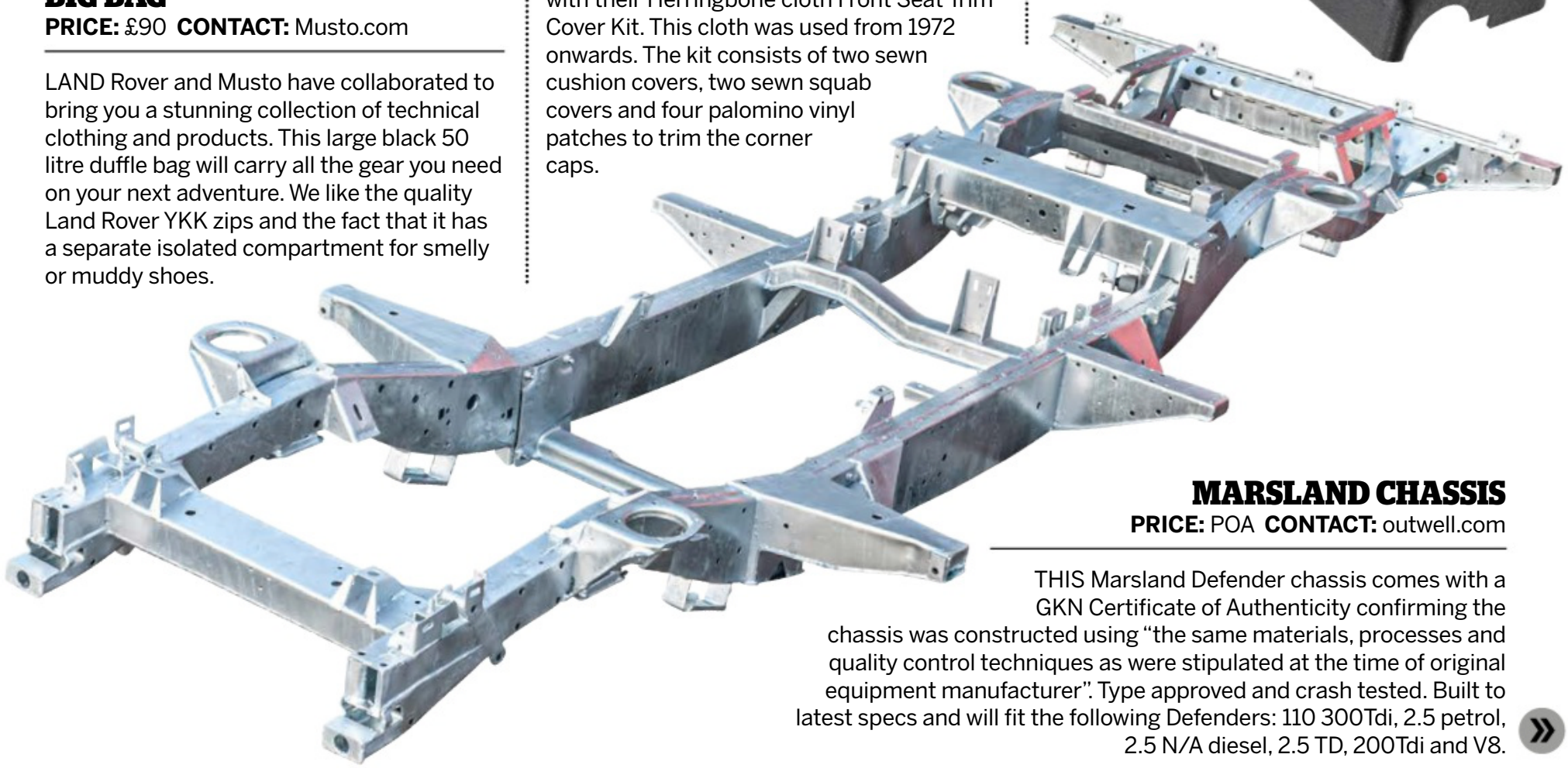
SIII STEERING COLUMN SHROUD

PRICE: £45.50 each
CONTACT: Britpart.com

THIS was previously an obsolete part and it was becoming harder to source good second hand ones so Britpart have reintroduced the Series III steering column shroud. Make sure you order both the top and bottom bits.







MARSLAND CHASSIS

PRICE: POA **CONTACT:** outwell.com

THIS Marsland Defender chassis comes with a GKN Certificate of Authenticity confirming the chassis was constructed using "the same materials, processes and quality control techniques as were stipulated at the time of original equipment manufacturer". Type approved and crash tested. Built to latest specs and will fit the following Defenders: 110 300Tdi, 2.5 petrol, 2.5 N/A diesel, 2.5 TD, 200Tdi and V8.

PRODUCTS

D4 BRAKES

PRICE: £35
CONTACT: Britpart.com

REAR brakes on your D4 a bit noisy or not performing as they should? This D4 rear axle full brake pad set will sort out the problem. If you also need fixing clips see part number LR019626 while front pads are SDB000636.



LIGHT UP YOUR PLATE

PRICE: Without camera £100, with camera £140 and mirror £40
CONTACT: optimill-uk.com

THIS CNC machined billet housing with bright LED light unit plugs directly into the existing wiring. Available in three colours: black, silver and grey. Also available with or without a HD 170 degree reversing camera which is adjustable and can be viewed. Or else purchase a clip over interior mirror with built in TFT monitor. When reversing the mirror screen lights up for reverse vision.



COILS FOR YOUR D4

PRICE: £950 **CONTACT:** Britpart.com

PLANNING a big expedition in your Discovery 4 and nervous about the reliability of the air suspension system? This comprehensive kit and module contain everything you will need to convert your D4 to a conventional coil spring suspension system. Kit includes four strut units and module to prevent the air suspension lights from being illuminated.





LRM PRODUCT REVIEW

BLOCKLEY 205 R16 RADIAL TYRE

PRICE: £140 plus VAT
CONTACT: blockleytyre.com

THOSE of us with an interest in originality for our classic Range Rovers and 1970 to 1995 era Land Rover 90s, 110s and Defenders have long had a problem if we want them to be wearing rubber that looks like the tyres fitted as standard back in the day.

By far the most popular of these was the Michelin 205 XM+S that would typically be fitted to your new 90, 110, Defender or Range Rover on both steel and alloy wheels in tubed or tubeless variants. For road use and mild off-roading it was ideal and to my eyes always suited the proportions of the vehicles but it's been out of production for a long time. My first Range Rover had them as the standard factory fitment from new, until I replaced them with more aggressive off-road tyres as my adventures away from the tarmac became more and more extreme, and my 1981 Stage I 88 inch also had them when it was new.

The problem is that all of my recent restorations on Range Rovers dating from 1970 to 1991, and my 1984 90 and the Stage I 88 inch, have had to be fitted with alternative tyres that bear a passing resemblance to the distinctive tread pattern of the XM+S, but are not exactly right. It's something that has irritated me for quite a while and I think it lets down both original and restored vehicles.

That's why I was delighted to learn that Blockley has announced a new tyre that replicates the period Michelin. When I had the opportunity to fit a set late last year I jumped at the chance and decided to put them on the steel Rostyles that I use in winter on my daily driver Range Rover 300Tdi.

So far I've covered just over 1200 miles of mixed driving including a few of my local greenlanes and I've been most impressed. They look right and they feel right, and they will be my first choice when the 'wrong' tyres on my other vehicles come up for replacement.

Gary Pusey

OPTIMILL



Special offer, buy both front and rear hinges together and save £35

Offer ends 29th February. Please quote ORP0120





FOR FURTHER DETAILS PLEASE
EMAIL INFO@OPTIMILLRACEPRODUCTS.COM
OR CALL 01282 844443

Optimill Ltd
Church Lane Works
Church Lane
Kelbrook
Barnoldswick BB18 6UF

Optimill Race Products

WWW.OPTIMILL-UK.COM

PLEASE VISIT OUR NEW WEBSITE!

01663 308 010

info@kd-lr.com

KDL Group (UK) Limited
Oakfield Farm,
Threaphurst Lane
Hazel Grove, Stockport SK7 6NN

KDL
KDL GROUP (UK) LIMITED

• ENGINES • GEAR BOXES • TRANSFER BOXES
• STEERING BOXES • DIFFERENTIALS
All remanufactured to the highest standards using genuine & OEM components

MARSLAND -CHASSIS-

KDL GROUP (UK) LIMITED

Working together with Marsland Chassis
- J.E Marsland Limited -

MARSLAND DEFENDER CHASSIS RENOWNED WORLDWIDE FOR OUTSTANDING QUALITY

GKN CERTIFICATE OF AUTHENTICITY

With a reputation that speaks for itself, precise fitting and long-lasting durability, the Marsland Chassis is simply in a class of its own

**KDL WORKING TOGETHER WITH MARSLAND CHASSIS –
J.E MARSLAND MANUFACTURING CHASSIS FOR OVER 30 YEARS**

BACK IN PRODUCTION

- Built to original specification…
- From the original drawings…
- Using the original tooling…
- On the original jigs…

…THE MARSLAND SERIES CHASSIS





Opening Times
Mon – Thur 7am-4pm
Fri 7am -2pm

www.kd-lr.com



DAVE PHILLIPS

The Vocal Yokel

Spot the difference

SPRING is in the air, Brexit is behind us and we can all look forward to a bright future, right? Well, sort of. The New Year certainly brought a smile to my face. In fact, I laughed out loud when I heard that Land Rover's Design Chief, Gerry McGovern, had been awarded an OBE in the New Year's Honours List.

Professor McGovern, 63, received his award for services to the automotive industry. He was the only UK automotive industry figure among almost 1000 in total to be recognised on the wider list of OBEs, MBEs, CBEs and other assorted gongs.

As a fan of Land Rover (the company), I'm, of course, delighted that McGovern can now call himself an Officer of the Order of the British Empire. I've heard him called a lot worse.

You see, like most fellow enthusiasts of Land Rovers (the vehicles) I've got mixed feelings about the models McGovern has penned. While it's good to witness the financial success of the company, I can't help thinking that it has come at a cost — most notably to the individuality that first drew me to the marque in the first place.

Or, to put it another way, these days all Land Rovers look the same.

When I first started writing about Land Rovers, nearly a quarter of a century ago, there were just three models: Defender, Discovery and Range Rover. All were very different-looking. A six-year-old boy keen on cars would be able to tell the difference at a glance. Even when Land Rover's fourth model, the all-new Freelander, came along, that, too, stood out from the crowd.

The six-year-old boy I just mentioned is important, because I can still remember my six-year-old self, looking forward to car journeys so that I could spot the different cars. Back in the 1960s they were very different indeed. The rich diversity of models from all those British marques was an automotive wonderland for a car-mad youngster. Even today, when watching old British movies or newsreel footage, I find myself looking out for those wonderful cars.

Why was that? Because back then there wasn't much room for fancy-dan designers in the British motor industry. Cars were, in the main, designed by engineers. It was only when the mechanicals had been sorted out that they grudgingly allowed a 'stylist' to tart it up a bit.

Land Rover was a leading exponent of the oil-stained art of British auto creation. When the original Range Rover was being conceived in the late 1960s, chief engineer Spen King spent an afternoon sketching his proposed outline on a scrap of paper. It was so good that when it was passed on to the stylist, David Bache, he did little more than tidy up the edges.

> "I'm delighted McGovern can call himself an Officer of the Order of the British Empire. I've heard him called a lot worse"

That's the way cars were made in those days. When I get nostalgic about that golden era, some folk tell me that the world has moved on and that "things are different now". I appreciate that they are indeed different, but I'd argue that they don't have to be.

McGovern himself says: "It's about recognising our unique heritage but not being harnessed by it, creating relevant vehicle designs that truly resonate with customers on an emotional level."

I'm guessing that, roughly translated, that means: "We all know what traditional Land Rovers used to look like, but I prefer to design cars that appeal to people because they look nice."

Celebrating McGovern's OBE, JLR issued a press statement, saying: "As Chief Creative Officer for Land Rover, Gerry McGovern creates some of the world's most distinctive and desirable vehicles and is recognised as one of the world's critically-acclaimed automotive design leaders."

There's only one word in that 32-word sentence that I disagree with — and that's 'distinctive'. Modern Land Rovers are most definitely not distinctive. That's why this page is illustrated with pictures of all seven of the current offerings — all designed by McGovern. Apart from new Defender, you don't have to be a car-mad six-year-old to have trouble spotting the difference.



Ex-LRM Editor Dave has driven Land Rovers in most corners of the world, but loves the British countryside best



Foley Gun Bus (built to order)

www.FoleySV.com

Service - Sales	Overland Preparation	Conversion
Restorations	Export	Foley 6x6

exMoor Trim · LAZER HIGH PERFORMANCE LIGHTING · FRONT RUNNER VEHICLE OUTFITTERS

WARN · Safety Devices TECHNOLOGY OF PROTECTION · ARB · WÜRTH · Dynamat

Chassis change Specialist. MARSLAND Chassis Stockist

"Building A Better Defender"

Specialising in modification, bespoke builds, 6x6 conversions and the supply and fitment of all brands of equipment. We also have a dedicated bodyshop and engineering department. From a small door repair to a full restoration and new chassis fitment, we are here to guide you along the way ensuring your requirements are met.

Please feel free to call, email or even better come and visit us.
We are 30 minutes from London and Stansted airport.

World Wide Export
and Rebuild Specialist

Tel 01279 793500

The Roses, Epping Road, Roydon, Essex CM19 5DD
Email sales@foleysv.com

FOLEY
Specialist Vehicles Ltd



GARY PUSEY

The Enthusiast

Them and us?

I'VE just been looking at some photographs taken in North Wales in 1992 during my first off-road challenge weekend. These were a new idea back then and allowed supervised access to private land for a wide variety of competitive off-road, erm... challenges! They were brilliantly organised by David Mitchell and were very popular.

I went on several in the early 1990s and what great weekends they were. And probably the best off-road driving lessons I ever received, courtesy of David and his team of instructors. They certainly awakened in me a passion for off-roading that occupied a lot of my time for several years.

Looking at the pictures now, one thing strikes me, and it's this. The majority of the vehicles taking part could still be bought brand-new and factory-fresh from your local Land Rover dealer. Most of the participants on that challenge weekend in 1992 were driving Defenders or the Defender's immediate predecessors, the Ninety and OneTen, which were identical in all but name. A few were in Series vehicles. There were three Range Rovers and one Discovery. Which meant that back then we all felt a very close connection to the company because we were driving Land Rovers that were basically the same as the ones still being built at Solihull.

Fast forward to today, and one thing is immediately obvious. During the intervening 28 years, the Range Rovers and the Discovery on that challenge weekend have been superseded by the next generations, to the extent that we are now on the fifth iteration of the Discovery while the fifth-generation Range Rover is due next year. Only the Defender soldiered on until that, too, finally went out of production in 2016. And now we also have New Defenders, Range Rover Sports, Discovery Sports, Evoques and Velars. Each new version or additional model seems to take the brand further and further upmarket, and each has to be more car-like and capable on the tarmac, as well as being a competent off-roader.

But here's the thing. If you organised a similar weekend of tough off-road driving this summer in North Wales, which Land Rovers would we see? Would the participants turn up in vehicles that are part of the company's current model line-up? Would we see full-fat Range Rovers and Discoverys, or the Sport versions of either? Would there be a few Velars and half a dozen Evoques? Would there be a New Defender or two?

My guess is we'd see a line-up of Land Rovers that would not be dramatically different from those that came to that challenge Weekend in 1992, perhaps with the addition of the odd Freelander, Discovery II or P38A. I'm not sure we'd see many new

> "Brilliantly organised by David Mitchell, I went on several challenge weekends in the early 1990s and they certainly awakened in me a passion for off-roading"

Evoques, Velars, Range Rovers or Discoverys, though, because I doubt they venture off-road very often, if at all!

I've been thinking about this and I wonder whether we've now reached the point where there are two distinct communities: people who enjoy driving, off-roading, tinkering with and restoring older Land Rovers, and people who buy new ones. I think this has been the way with any number of other marques for years. I have friends who are big into the classic car scene with their pre-war BMWs, their 1960s Jaguars or their 1970s Fords who have no interest whatsoever in the current offerings from those manufacturers, and certainly don't own any. Is it possible the same thing could happen with fans of older Land Rovers? Maybe it already has.

The past five years have witnessed the biggest investment in its heritage that Land Rover has ever made, culminating in the wonderful Classic Works facility at Ryton, the Reborn programmes and the ongoing commitment to remanufacture parts to original specification.

But while this is all very welcome, does it actually do anything for the average enthusiast whose old Land Rover vehicle could be years, if not decades, past its production date? How many of us can stump up £80,000 for a Reborn Series I or £135,000 for a Reborn Range Rover, let alone £150,000 for a remanufactured Defender Works V8. So the target market for these offerings is not the average enthusiast but a community of well-heeled customers around the world who will more than likely have bought-brand new vehicles, perhaps with the kind of bespoke options offered by Special Vehicle Operations, and then been tempted by something cool, classic and mint that was put together in JLR's Classic Works.

Don't get me wrong. I am all in favour of JLR pursuing this market and creating interesting vehicles that help to keep the Land Rover brand vibrant and dynamic. And if they can make money out of it then that's great. I just don't see how it helps the vast community of fans of the marque around the world who are keeping their old Land Rovers going with more real-world budgets.

Remanufacturing obsolete parts is the thing that will reconnect us. We'd all welcome it, I'm sure, but the list of parts is long and the costs of recreating drawings, making the tooling, ensuring the part is compliant with what must be a raft of legislation, dealing with what will undoubtedly be low production volumes, and still trying to ensure the remanufactured component is affordable, will not be easy. I really hope JLR can make it work. And I really want a brand-new Boge self-leveller, please!

Gary Pusey is co-author of Range Rover The First Fifty, trustee of The Dunsfold Collection and a lifelong Land Rover enthusiast. What this man doesn't know, isn't worth knowing!

DEVON 4X4 Centre Ltd

SUPPLIERS OF
EXPEDITION AND COMPETITION EQUIPMENT





RIVAL

Tough. Stylish. Functional

Devon 4x4 becomes the official UK distributor for Rival products

Browse the full range of RIVAL accessories at **www.devon4x4.com** :-

- Aluminium front and rear bumpers
- Heavy duty recovery points
- Discreet winch mounts
- Skid plates
- Tailgate assist kits
- Steel side step bars
- Bonnet strut kits
- Powersports
- Roof racks









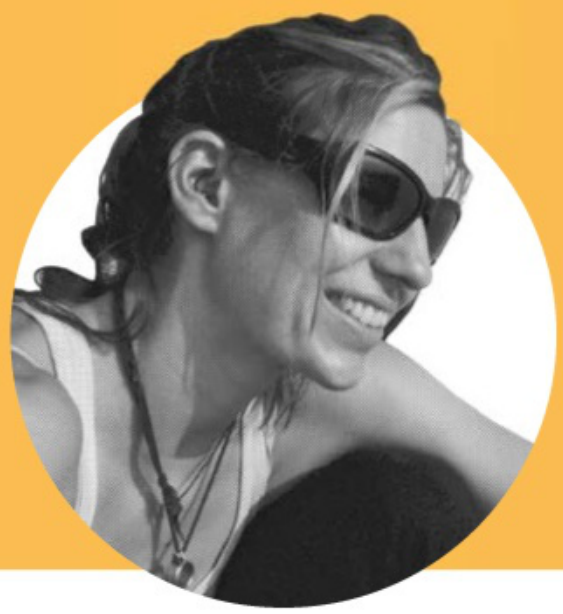


DON'T WAIT FOR PAY DAY!
FINANCE AVAILABLE
INSTANT DECISION

T: 01769 550900

D44 Store Ltd., Southlea Business Park,
South Molton, Devon EX36 3QU

www.devon4x4.com
For everything off-road



THOM WESTCOTT

Roving Reporter

Life transitions

AFTER picking up the Lightweight from its service, what should have been a lovely drive home was somewhat marred by the distinct feeling that it was not as happy as I to be back on the road.

Being petrol (cue obligatory sharp intake of breath at the shocking cost of running a 2.25 engine these days), the Lightweight has always boasted nifty acceleration at traffic lights and is normally able to hold its own on the motorway. But today, it all seems like the most gargantuan effort. I phone Tim the Overworked Mechanic to troubleshoot and he suggests filling the new tank with 'high-quality' fuel and giving that a whirl.

This advice seems perplexing, as we're not in Iraq where you have a more obvious choice of grubby plastic containers of petrol sold by the roadside, or a fuel station. I wasn't aware that garages in England differed greatly in the fuel quality they offered. Thinking that 'high-quality' could be substituted with 'expensive', I plump for a 'branded' fuel station, as opposed to the slightly cheaper supermarket option.

It makes no difference whatsoever. The Lightweight's former get up and go appears to have got up and gone. It's behaving like an elderly person, rising unsteadily from an armchair accompanied by a lot of creaks and groans. And increasingly audible moans as, after a tardy stretch on the dual carriageway, where we are shamefully overtaken by a stream of lorries, the engine is making quite a racket. It's a loud, unhappy and consistent sound, of the sort I'd associate with a blown head gasket.

Sick of ferrying the Lightweight back and forth to south Devon, I phone an erstwhile mid-Devon mechanic who did a great MoT rescue job some years back. He's busy building some edifice, weeks behind schedule, and says he won't be available for several months, which sends a crystal clear message.

It's clearly time to find a new local mechanic so I pop into my local Land Rover parts specialist Brookwells seeking recommendations. "That bloke who went out as you came in is probably your best bet," the sales assistant says. Out on the forecourt, I find he has already driven off, but the sales assistant obligingly gives me his number.

On the phone, after exchanging a few niceties, this potential mechanic asks what sort of Land Rover I have. "Ah, a Series," he says, his voice full of reluctance. "I don't really take on Series vehicles anymore." I'm getting accustomed to this response and really can't blame any mechanic for feeling this way. Could he recommend someone else? Yes, he could.

"Do you do Series vehicles?" I ask Konrad (aka Kon) from the outset, to save time on niceties. His Devonian twang purrs back

> "The Lightweight's former get up and go appears to have got up and gone. It's like an elderly person, rising from an armchair, creaking and groaning"

that he certainly does, and we fix a time for that afternoon.

When I arrive, he suggests we go for a drive so I can run him through what's wrong. I drive out of town, complaining, and then he drives back into town, complimenting the brakes (I glow with pride) and the steering (that's a first!) but gets the point about the Lightweight having no gusto.

Returning, inevitably weeks later than planned, I phone Kon to check when I can pick up the Lightweight. "She's running like a sewing machine," Kon assures me, before adding, somewhat enigmatically: "I do like to tell customers who haven't seen me in a while, that I may look a bit different, as I'm going through a bit of a transitional period." I say I'm more interested in his mechanical abilities than his appearance.

The next day, I arrive to find the Lightweight happily ticking over outside the little garage, with Kon enthusing about the heaters, which have been quite effectively de-misting the windows. I'd never even tried that function, just assuming it wouldn't work.

The offside rear indicator has stopped working, again. While I sit on jerry can, Kon strips back the wiring, telling me about the journey from being a thick-set, bearded, 17 stone country boy, to the realisation that he was actually in the wrong body, and subsequent ongoing transformation towards womanhood. Kon's fascinating and light-hearted outlook on gender, accompanied by before and after photos, is interwoven with tales of the 40 Land Rovers that have, to date, passed through his/her ownership.

For all my feminist leanings, I've never actually used a female mechanic before. Some 14 years ago, before the topic was so openly discussed, my brother was recommended a trans Land Rover mechanic called Mary somewhere up near Hemel Hempstead, who was apparently brilliant under the bonnet. It was quite far from where I was living in Central London so I never made it up there but perhaps my Lightweight which, after all, only really likes being driven by me, was always destined for a woman's touch.

Now the indicator is fully-functional, the most pressing (and rather selfish) question for me is whether Kon-Konnie will, in the future, be sticking to her profession as a Land Rover mechanic or perhaps opening a nail salon. Thankfully, especially considering how well the Lightweight is now running, she's sticking with the Land Rovers. "I've no intention of changing professions," she says. "I always enjoy getting stuck into the job and then, after a hard week's work in the garage, getting dolled up and going out with my friends."

And I'm feeling very modern with my new transitioning mechanic.

Thom Westcott is a British freelance journalist who has written for the Times and Guardian, and now mostly spends her time reporting from Libya.

PROUDLY SUPPLYING THE LAND ROVER COMMUNITY FOR 45 YEARS

PADDOCK
SPARES AND ACCESSORIES

T UK: 01629 760 877
T Export: +44 1629 760 877
www.paddockspares.com
sales@paddockspares.com
The Showground, The Cliff, Matlock, Derbyshire DE4 5EW

MAIL ORDER SPECIALISTS

Free mainland UK economy delivery on all online orders over £60 (inc VAT)
Mainland UK express delivery for orders over £60 only £6 (inc VAT)
Sat & Sunday delivery available (Postcode and size restrictions apply)
We dispatch daily to Europe and the rest of the world.
Delivery to Europe from £6 (inc VAT) per parcel upto 30KG
DHL Express available, prices are dependant on weight and postcode

THE LARGEST CHOICE OF BRAND NAMES IN THE BUSINESS

DEAL DIRECT WITH THE WORLD'S LARGEST INDEPENDANT RETAILER OF SPARES AND ACCESSORIES FOR THE LAND ROVER MARQUE



JACK DOBSON

Dobbo Down Under

It's a girl (baby that is, not a Landy)

A week ago, we were finally given the keys to our new home. It has felt like a very long wait and there was a bit of trepidation on my part since Leah had not even seen the place! Thankfully she approves and it is lovely to finally be free of renting. There will be no more angst (from me at least) when it comes to oil leaks on the driveway.

The three Land Rovers seem to be settling in – we have a twin carport and a single garage. Whilst I would have welcomed a bigger space (I am hankering after a Series I) I am grateful we have the room to at least park all the vehicles undercover. I have been warned that Brisbane occasionally gets struck with huge hailstorms, and the effects on an aluminium-bodied Land Rovers could be devastating. Last week, Canberra was struck by golf ball-sized hail which caused an estimated $320 million worth of damage. Vehicles suffered broken windows and extensive damage to bodywork — a friend now has a Defender riddled in small dents. I feel damn lucky we moved when we did.

The last week has seen lots of shifting of household items and in a bid to save some cash we managed to move everything into our new home using a Discovery 3 and my 109. Between them we have been able to carry fridges, a washing machine, wardrobes, beds, you name it. With the roof off the 109 there is very little it cannot carry and it makes life so much easier if you are able transport big items yourself. Without it we would have had to hire a van for many of the jobs I have been doing this week. Aren't 109s great?!

On top of moving, I also managed to get our three Land Rovers registered in Queensland. I was expecting this to be an absolute nightmare as each required a roadworthy inspection and we all know how difficult that can be with an ageing Land Rover, let alone three of them. To my utter amazement, they all passed with the exception of our Defender which apparently needed a new brake light (I am not entirely convinced but felt we should just take that hit as everything else seemed to be deemed safe). With new registrations, each of the vehicles now have new number plates. I could not retain Grandma's '958 XYB' which was her original UK Somerset registration so, instead she now has 'XYB 88' and Old Girl has 'XYB 109'. Big thanks to Leah for getting me the plates for my birthday. It was quite funny – I had been moaning that someone had taken the plates I wanted, little did I know it was my dear wife.

> "Using my Series daily, I have identified a few accessories, that I think will come in handy. Hopefully others will agree and I'll make my fortune."

In other big news, a couple of days ago we were joined by a new, very small addition to our family (no, I am not talking an 80 inch Series I). Baby Amala Dobson was born which is why I have been a little late getting this month's column across to Patrick. Leah and Amala are both doing fantastically well and I hope to have Amala saying 'Land Rover' in no time.

With the new arrival there are immediate plans to fit a baby seat in either of the two Series' vehicles but our Defender is primed and ready. At considerable expense we had to get an anchor point fitted and certified for the seat (mounted where the luggage tie-down was formerly located). I think this is yet another slightly strange Australian requirement and, had I not seen someone else talking about it on the Australian Land Rover Owners forum (aulro.com) it would not have occurred to me that it needed to be dealt with. Anyway thankfully it is now done and with the seat installed behind the front passenger seat there is practically no room for either baby or passenger. I am surprised by how much room the child seats take up.

So with our new addition, does that mean my @jackuar_land_rover Instagram account will now be awash with baby pictures? Fear not, I do not intend to become one of those parents, though please do give me a nudge if that does start to happen.

That's enough baby talk, what other Land Rover news have I to share? Well I am working on a little side project for Series Land Rovers. Using mine daily, I have identified a few, fairly subtle accessories, that I think will come in very handy. Hopefully others will agree and I'll make my fortune.

I am in the midst of creating a prototype and to be honest it is not coming together particularly well. Whilst I might be pretty reasonable at working on Land Rovers, when it comes to smaller components and, dare I say it, plastic, I possibly lack the required finesse. The brief I have set myself is that the designs must be in keeping with the basic interior and must be able to withstand tough conditions. I am making the prototype in the basement of our new home.

Anyway, that is all I shall share for now (I do not want you lot stealing my design ideas), hopefully I will have something further to share in the next couple of months. Watch this space!

When Brit Jack Dobson emigrated to Australia in 2010 he took his passion for Land Rovers along with him.

The Raptor Defender Dash Console ....designed by enthusiasts for enthusiasts



Our famous Dash Console has become a massive success amongst enthusiasts who for years have faced the heartache of where to mount their additional equipment. Our Console is made from steel and aircraft grade aluminium with removable, interchangeable pre-cut panels along with a unique bespoke service offering custom cut panels. Suitable for pre 2000 (prior to TD5 Facelift) Defender & S111.

To complement your Raptor Console please see our website to view the full range of our products & accessories available including Steel Binnacle and Binnacle Mounts, Dash Trim Panels, Pods, Glove Box, Cubby Box, Switches & Sockets.

RAPTOR ENGINEERING

We also produce Puma Glove Boxes/Pods & Discovery Consoles

To place your order please visit www.raptor-engineering.co.uk



Grilles & Lamp Surrounds, Vents & Lamp Guards

www.kbxupgrades.com

See our website for Retail Outlets

SP PANELS

British Manufacturer & Retailer of body panels for Defender & Series models



GALVANISED DEF FULLY BUILT UP COMPLETE RH FRONT DOOR WITH DOOR CARD AND HINGE
PRODUCT CODE: JWP5060
£750.00 Exc VAT



GALVANISED DEF FULLY BUILT UP COMPLETE LH FRONT DOOR WITH DOOR CARD AND HINGES
PRODUCT CODE: JWP5061
£750.00 Exc VAT



GALVANISED DEF FULLY BUILT UP COMPLETE LH 2ND ROW DOOR WITH DOOR CARD AND HINGES
PRODUCT CODE: JWP5071
£850.00 Exc VAT



GALVANISED DEF FULLY BUILT UP COMPLETE RH 2ND ROW DOOR WITH DOOR CARD AND HINGES
PRODUCT CODE: JWP5070
£850.00 Exc VAT

Type of locking?
Manual
Central Locking [Add £50.00]

Type of push button door handle?
With Blanked off lock hole (83-05)
With 16mm Diameter lock hole (83-02)
With 20mm Diameter lock hole (02-05)
[Add £10.00]

Type of winder mechanism?
Manual
Electric [Add £55.00]

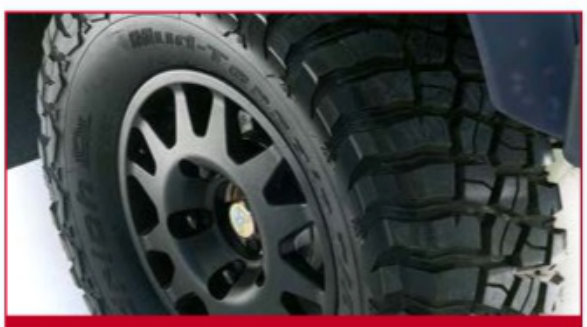
With door loom?
No loom
With loom [Add £40.00]

www.sp-4x4.com

EXCLUSIVE DISCOUNT FOR LRM READERS: LRMONTHLY5%



The World's best accessories for Land Rover Defender



Wheels Brakes and Drivetrain



Suspension and Steering



Protection



Exterior



Lighting



Interior

Terrafirma Serious 4x4 Accessories:
Certified Manufactured to Specification

For more information
visit www.terrafirma4x4.com
email sales@terrafirma4x4.com

TerrafirMa
Serious 4x4 Accessories

DUNSFOLD DIARIES

WITH PHILIP BASHALL



THE DUNSFOLD COLLECTION
is not yet open to the public but is hoping to establish a permanent museum. You can help make that a reality by becoming a Friend of the Collection for an annual subscription of £35. Visit dunsfoldcollection.co.uk to see more.



It's goodbye from me

After penning 68 Dunsfold Diary entries, Philip is signing off – for the time being

A little over six years ago, former LRM editor Dave Phillips asked me if I'd consider writing a monthly column for this magazine. I wasn't sure about it at the time; how could I possibly find something to talk about every month? But I was persuaded that it would be good publicity for the Dunsfold Collection, and I thought it might be worth doing for a year or so, maybe two years, tops.

And now here we are, 68 columns later. When I wrote the first Dunsfold Diary, the Collection had not yet achieved charitable status — that happened in time for column number three — and it had about 130 vehicles; now we're up to 150. But I've decided it's time to call it a day on the Diaries. The Dunsfold Collection will carry on, but I'm hanging up my workshop Biro.

It's been an eventful six years. In January 2016, I watched the last of the old-style Defenders come off the production line at Solihull, and as I write now the first of the new Defenders are on the road in the hands of JLR managers and engineers. How long will it be before new Land Rovers are all powered by electricity? I hope that my Range Rover's armchair seats will see me out — electric vehicles just don't float my boat.

The reason I agreed to put together Dunsfold Diaries in the first place, I freely admit, is in the hope that it would drum up some funding for the Collection. I'm convinced that people think that, because I'm always buying vehicles, I'm made of money and the Collection doesn't need funding from elsewhere. Or they think we are bankrolled by JLR. But that couldn't be further from the truth.

Here's the reality of the situation. The Collection is made up of vehicles owned by the charitable trust but also a number that are on loan to us. Many of these loan vehicles have been offered to the Collection because their owners have no room to display or store them, and if the Collection didn't take them in there's every likelihood they'd be scrapped. Some of them, such as the camouflaged prototypes, cannot be sold to the public so the options for preserving these are very limited indeed. That's why we step in, because we think they are important parts of



The Dunsfold Collection often hires vehicles to JLR for media events such as the Goodwood Revival



The beginning: young Philip (red coat) and family



...and a kind of end; 2016 on the old Defender line

Land Rover's rich and unique history and must be saved.

The trouble is, none of these vehicles come with what you might call a dowry. In other words, the costs of storage, insurance and maintenance for them, together with the ones that are actually owned by the charitable trust, have to be met by the Collection.

A number of other vehicles are loaned to the Collection by private owners, including the trustees, but all the costs of storage, insurance and maintenance for these vehicles are met in full by their owners. The reason why many of these privately owned vehicles are so important to the Collection is that they are the ones that are of interest to businesses who will hire them for things like film work. JLR also hires vehicles from the Collection from time to time, for press events and the like. These 'earners' are able to contribute to the costs of preserving the vehicles that are never going to earn money to cover their upkeep.

Besides hiring out its vehicles, the Collection also tries to raise money by inviting Land Rover enthusiasts to become Friends of the Collection and by inviting people to make donations. We also have our Wall of Fame on our website, which recognises people who make significant donations or take out lifetime Friends membership. That's why the support of individual Land Rover fans is so important.

However, I'm convinced that for the Collection to flourish, it needs a proper museum to show people what we're all about and to attract visitors. As I wrote in LRM's February 2015 issue: "My 'fantasy museum' would contain diorama displays for key vehicles — imagine a Darien Gap Range Rover in a mocked-up section of jungle, or a Pink Panther SAS Land Rover under a camo net on a patch of desert..."

Such a museum could also serve as a venue for club events. I could envisage, say, the Series II Club hosting a meet, where historic Series IIs from the Collection were on display; where talks were given or practical workshops held on technical subjects, and drive-outs made into the surrounding countryside. And then there's our vast archive of Land Rover documents, photos, brochures and memorabilia. None of that is easily accessible to visitors at the moment.

One of the rewards of writing these Dunsfold Diaries has been the previously unseen photographs that have come out of the woodwork. Sometimes we are bequeathed collections when enthusiasts pass away, although of course documents and photos also cost money to store and look after. I believe that some museums have a policy now of not accepting bequests of material unless a financial legacy is part of the package, but how do you tell a grieving widow that she will have to pay thousands of pounds to have her late husband's collection taken care of? That just seems wrong to me.

You might be wondering why we don't pursue crowdfunding or a National Lottery grant instead. The problem here is that it's a chicken-and-egg situation: you need something that already exists on which to base your application — yet without having the money to get that established, you can't ask for more to develop it.

The second problem is that none of the trustees are professional fundraisers. LRM contributor Gary Pusey produces our Newsletter and runs our website, Richard Beddall (who has been involved with the Collection since the 1970s) is a well-respected figurehead, and I'm basically the spanner man. Is there a professional fundraiser out there who'd be willing to come onboard?

None of the trustees is paid by the Collection, of course, and we're lucky to have an incredibly loyal band of supporters. I know that in an emergency I can pick up the phone and rely on a core of volunteers to come over and lend a hand. Occasionally we'll get together a working party, maybe to pull all the vehicles out of a particular shed and give them a good wash and brush up.

In terms of numbers of vehicles, I don't think the Collection needs to expand much more now, although there's scope to fine-tune it. In the long term, its future is secure, because all my vehicles and property have been left to it in my will. When I die, the Collection gets the lot. Until then, however, it desperately needs money to keep it going. After all, we're not a bloomin' charity – even though we actually are!



At present, vehicles have to be stored in big sheds



Dunsfold does its best to get them out on display



Forest Rover is one of Dunsfold's star attractions

WITH RICHARD HALL



Original is best

IT is a long time since I bought and sold old Land Rovers for a living. Dealing in used vehicles was how I started out in the game, but I never found a way to make it pay. I quickly learned that cheap Land Rovers are usually cheap for a reason: by the time I had sorted out all the mechanical and structural issues to the point where I was happy to offer the vehicle for sale, there never seemed to be enough profit to pay the workshop rent, let alone feed and house myself. A couple of the vehicles I bought turned out to be worse than I thought, so I broke them for spares and made more money than I would have done trying to get them roadworthy to sell in one piece. Having almost bankrupted myself I decided to concentrate on repairing Land Rovers for other people instead.

I still like to browse through the vehicles advertised for sale, mainly to keep me in touch with classic Land Rover values, but also in the forlorn hope that I might spot a bargain before anyone else does. I was chatting the other day to my friend Lee, who works a couple of units down from me and does to rusty Japanese sports cars what I do to neglected old Land Rovers. We agreed that the Internet has a lot to answer for: someone with an old Land Rover to sell will go onto eBay, look at the highest price being asked for a vehicle which looks a bit similar to theirs, and that is the price that they will ask, not a penny less. I get a couple of calls a week from people offering to sell old Land Rovers to me, always at top retail price. I try to be polite, but six grand for a Series III with no MoT doesn't leave me a lot of margin to play with.

Fifteen years ago I was being offered Land Rovers free to take away by people who just wanted them gone. I picked up a lovely Series IIA from a lockup in West London (off the road for 20 years, gearbox in bits in the back) and even then I didn't make a lot of money back when I recommissioned it and sold it on. Almost unbelievably, someone gave me a Stage One V8 Station Wagon. He had got halfway through replacing the rear crossmember, run out of skill and enthusiasm, and now needed it shifting urgently as he was about to move house. I ended up restoring it for a customer (full restorations being another way to lose money on old Land Rovers).

One thing I have noticed from my regular perusal of the classified ads is that original, unbodged vehicles are getting a lot harder to find than they were a few years ago. That is entirely unsurprising. Time passes — the youngest Series IIIs are now 35 years old, the oldest Series IIs the far side of 60. Fifteen years ago it was still fairly easy to find 'timewarp' Land Rovers which had been used but not abused, repaired but never restored or modified, and had what the antiques trade would call patina. I bought a long wheelbase Series IIA for a three-figure sum, straight off a farm in deep rural Suffolk where it had spent almost its entire life. The paintwork was faded and worn away in places, every body panel was dented, but it ran like a Swiss watch. I drove it to Birmingham (appropriately) for its new owner, 60 mph all the way on the A14 and good as gold. It probably thought it was coming home.



Straight off the farm and never been bodged

I very seldom come across vehicles like that nowadays. The roughest examples have all been scrapped and the rest tarted up with fresh paint, reupholstered and accessorised. A clean, shiny, freshly retrimmed Series vehicle is very nice, but give me originality any time. That isn't just a matter of personal taste. From a professional standpoint it is a lot easier to work on an old Land Rover if someone else hasn't been there before you and bodged the thing half to death. Right now I have a Series IIA lurking at the back of my workshop which demonstrates the point nicely.

It is quite an early example (1964) with many of its original features intact but has led a long and hard life and has not always had the attention it deserved. Somehow it has survived and came to me with a fairly long list of jobs to be done. I took it for a short test drive and added a gearbox rebuild to the list. I suspect the castellated nut at the front of the layshaft has come loose: the gearbox makes some very strange noises in the lower gears.

The first job was to sort out some issues with the rear body tub, principally that it was not attached to the rear crossmember and was only being held down by the weight of the hardtop. The entire bottom edge of the tub had corroded to the point where the securing bolts had pulled out altogether. The vehicle had taken a bad knock to the nearside rear, with the lower rear wing being buckled and full of filler. The lower edge of the nearside rear panel was stoved in, but the rear end of the wheelarch box had survived unscathed. The offside was a little better but still crumpled like an old crisp packet. Even ten years ago good straight 88 inch body tubs were like hens' teeth — nowadays you have to make do with whatever is on the vehicle. I decided to replace both rear panels and the body mounting strip, all of which are readily available new.

Series body tubs were assembled from aluminium panels spot-welded together, with galvanised cappings riveted to the edges for added strength. Spot-welding

aluminium is a specialised process and not one that most Land Rover repair workshops are equipped to offer. I have seen body tubs repaired purely by riveting, but the end result lacks rigidity and will fall to bits once the panels start moving against each other and wear the rivet holes oval. The best solution in terms of cost versus strength is to bond the panels together with a specialised industrial adhesive (I use Sikaflex 552), using pop rivets to hold the panels together while the adhesive cures. Along most of the joins the capping rivets will do this job nicely, with just a few more rivets required in places where there is no capping.

The first job with this tub was to remove it from the chassis, revealing the latter to be nice and solid with no obvious welding needed. There was plenty of evidence of previous welded repairs but all looked to have been done to a good standard with a reassuring ring when tapped with a hammer. The cappings were held on with a mixture of domed and pop rivets (this is how they left the factory): the former were decapitated with a sharp chisel, the latter drilled out. It was then a matter of identifying and drilling out (5 mm drill bit) all the spot welds holding the rear panels to the wings and arch boxes before running a spot weld chisel along the joins.

I was aware that this tub had taken a bit of a battering so I wasn't in any hurry to start glueing new panels into place until I was sure I could persuade everything to line up so that the tailgate would still fit. I also knew from previous experience that if I drilled any rivet holes after applying the Sikaflex I would end up with metal swarf stuck in the join between the panels. So I decided to trial fit the new components using M5 nuts and bolts in the places where the rivets would go. Fitting new panels to a body tub is a job I find very satisfying as in a fairly short time the shape is completely transformed with crisp, square edges. Having got everything bolted together I straightened out a couple of bent mounting tabs on the rear crossmember, dragged Lee out from under a rusty MX-5 and the two of us lifted the tub, dropped it onto the chassis and slid it backwards until the new lower mounting strip butted up flush with the crossmember tabs. It all looked lovely, until I discovered that the trailing edge of the driver's side door now overlapped the front of the body tub by about half an inch.



After nearly half a century, the old rear panels were looking a bit battered

It did not take a genius to work out what was wrong. At some point in its fairly recent history the vehicle had been fitted with a replacement rear crossmember — this had obviously been welded to the chassis using the bent and buckled body tub as a reference point. With the tub now repaired and restored to its original length it was obvious that the crossmember had been attached too far forwards. To add insult to injury the rear face was some way off vertical. I could have corrected the errors by cutting through the chassis rails, moving the crossmember and then reattaching it. Taking into account that the area around the rear spring hangers was heavily patched and would probably need further attention in the near future I decided to fit a new rear quarter chassis, which is an easy enough job with the body off and should give many more years' service before the rest of the chassis reaches the point where replacement makes more sense than repair.

For another of my current workshop residents, that critical point has already been reached. An ex-military Series III 109, this one came in with instructions to tidy up a rather haphazard 200Tdi installation. The owner did not mention an MoT test but I checked the expiry date and found that the test would have run out by the time I had finished the work. The vehicle looked to be a solid and tidy example, although the fresh black underseal covering most of the chassis should have set alarm bells ringing.

From time to time I come across internet discussions about Tdi conversions, and inevitably someone will say "it just drops straight in, dead easy". I have now found one of the vehicles converted by that person. The engine had indeed just been dropped straight in, no intercooler, oil cooler ports blanked off and a K&N cone filter on the turbo inlet. Wires were draped haphazardly across the engine. There was a significant oil leak underneath. Engine out time. The 200Tdi as installed in a Discovery has four long bolts which go through the bellhousing and flywheel housing, locating in threaded holes in the block stiffener. The Defender variant has four recessed Allen bolts between the flywheel housing and the block stiffener. If these bolts are omitted, oil tends to leak from the bottom of the join between the flywheel housing and engine block. The Discovery flywheel housing can be modified to take Defender-style recessed bolts — I must have done a couple of hundred of these for people. On this vehicle there was no evidence that the flywheel housing had been modified.

The engine came out with little trouble, with the floor panels missing most of their retaining screws it helped speed things along. But while I was fiddling around at the front of the vehicle I noticed a couple of corrosion holes in the front dumb irons just behind the bumper. I prodded the area with


Body tub starts to take shape

a screwdriver, made a couple more holes and decided that the bumper would need to come off to effect a proper repair. So I took an impact gun to the bumper bolts and both dumb irons basically disintegrated. This was not looking good. The nearside was by far the worst and the cause was not hard to find — the inside was full of wet sand. I have seen this before, usually on vehicles which have been extensively off-roaded in old quarries with plenty of deep wading. The sand never dries out and the moisture gradually eats through the bottom face of the chassis from the inside out.

I took a hammer and worked my way along the chassis from front to back. Almost everywhere I tapped the bottom face there was a dull thud as the hammer went straight through the metal and into wet sand. The outriggers were rotten and full of sand, ditto the crossmembers. The 'solid looking' chassis was beyond economic repair. I rang the customer to give him the bad news, and slightly to my surprise he asked me to quote for a new chassis. To be fair the rest of the vehicle isn't in bad order: good bulkhead, straight rear tub, parabolic springs and plenty else to commend it. It is a good few years now since I announced that I would not be doing any more chassis-up restorations: somehow the blasted things keep sneaking in through the back door.



Even a leaky diesel tank couldn't stop this Series III from rusting out



My latest acquisition awaits the inevitable Discovery 1 welding marathon

Discovery shenanigans

AS if I did not already have enough to keep me busy, my old three-door Discovery 200Tdi is broken. While out on loan it was accidentally driven through deep floodwater during a violent storm, resulting in (I suspect) a bent conrod. I haven't yet had the vehicle back but apparently it runs roughly, smokes and sounds unhappy. I'm not expecting an easy fix, given that the air filter housing had pond weed in it. There are only two things I would criticise on the 200Tdi engine: the low-mounted turbo on the Discovery version (vulnerable to water ingress as many people have found to their cost) and the separate block stiffener which makes piston and conrod removal an engine-out job.

It might be a little while before I can get round to tackling the repairs. In any case I am aware that the front inner wings will need replacing in the near future and it would make sense to do this job while the engine is out. For the moment I find myself without a vehicle for towing and shifting heavy parts. Dave the landlord's Range Rover P38 (for sale last month) has gone to a new home, and in any case I'm not brave enough to run a luxury-spec P38 as a work vehicle.

Salvation may be at hand. Just before Christmas I acquired a five-door Discovery 300Tdi as an engine donor, with about three days left on the MoT and a boot floor which is only tenuously attached to the rest of the bodyshell. The vehicle has had a leaky rear sunroof for a long time and the interior is pretty much ruined. It is a tidy old thing otherwise, with minimal mileage for an old Discovery (110,000 on the clock) and straight, shiny panels. The front end seems rot free and the sills aren't too bad either. I was already thinking it was probably too good to break when disaster struck my own vehicle, so I put the 300Tdi into the local MoT station to see what it needed apart from a boot floor.

Answer: not much. A wheel bearing, a fuel tank strap, a tyre, and the front passenger door does not open from the outside. That's not too long a list for a cheap Discovery with a quarter-century of use and abuse behind it. I have ordered the necessary panels and as soon as I get the chance I will set about it with angle grinder and MIG welder. I would have asked Lee to do it for me, but he has more than enough work on his hands trying to stitch his rotten Ford Ranger pickup back together. At least I don't have to strip out the interior: the last owner threw away everything behind the front seats due to water damage. At some point I will need to replace the boot floor on the three-door as it is looking a bit crumbly around the edges. That vehicle too has had a leaking sunroof (now fixed). What is it about Land Rover and sunroofs? I had a sunroof-equipped Defender 90 in the workshop the other day, and the inside of that one was so wet, you could have kept goldfish in it.

Just to complicate my life further, the owner of Piglet (my old Discovery 300Tdi automatic) has bought a Range Rover L322 and is now wondering whether I would like to buy the old beast back. I have to admit I'm tempted: I never wanted an automatic and prefer the look of the three-door Discovery, but Piglet drove better than any other Discovery I have driven. Do I need three Discoverys?



Boot floor and arches will need more than just a couple of patches

JAGUAR

LAND ROVER



Independent Parts Specialist

Powered by

www.britishparts.co.uk

TEL 01438 354810

sales@britishparts.co.uk

British Parts UK
Wedgwood Way
Stevenage
Hertfordshire SG1 4QR

EXMOOR TRIM

GO ANYWHERE IN COMFORT

RANGE ROVER CLASSIC



1. RANGE ROVER CLASSIC FRONT RETRIM KIT (PAIR) INC ACCESSORIES



2. RANGE ROVER CLASSIC 2 DOOR R/H FRONT CARPET SET



3. RANGE ROVER CLASSIC TWO DOOR REAR SIDE TRIM PANEL PAIR (PALOMINO) MOULDINGS



4. RANGE ROVER CLASSIC TOOL ROLL COVER HARDURA



5. RANGE ROVER CLASSIC GEAR KNOB









CELEBRATING 50 YEARS OF RANGE ROVER AT EXMOOR TRIM

Calling All Range Rover Owners...

On Monday 23rd March 2020 Exmoor Trim will be hosting a celebration for the 50th anniversary of the Range Rover at their Showroom in Williton
10am – 4pm

Meet the team who worked on the original Range Rovers

Rare historic vehicles to be viewed

Lunch, teas and coffees provided

Tour of the Exmoor Trim factory

View the new Range Rover products by Exmoor Trim and receive exclusive discount on the products

50 Places Available
Please email nancy@exmoortrim.co.uk if you are wanting to attend

Trustpilot

EXMOOR TRIM
GO ANYWHERE IN COMFORT

+44 (0) 1984 635 060
www.exmoortrim.co.uk | mail@exmoortrim.co.uk

50 YEARS OF RANGE ROVER

Love, Actually!

Four Range Rovers and four different stories. Four drivers united by one common theme: a deep-rooted respect, admiration and love for a very special vehicle

Story: Gary Pusey Pictures: Alisdair Cusick



AS lifelong and passionate Range Rover enthusiasts, we're all keen to kick off the 50th birthday celebrations as early in the year as possible. That's why we've braved the pre-dawn start, the sub-zero temperatures, the thick fog and the rush hour traffic to get ourselves from all four points of the compass to Luton Hoo, home of Land Rover Experience London.

Snapper Alisdair Cusick is joining us for the day to work his magic and ensure we have some memorable photos for the file. He's also a Range Rover obsessive and his 1994 classic appears regularly in the pages of LRM. Sadly, it's not here today and Alisdair explains that he has an ignition problem that is proving difficult to fix. He doesn't trust the car to get him to such an important photoshoot on time.

Instead Philip Cook has brought his immaculately-restored 1993 LSE Autobiography while Will Meacham has come in his totally original 1990 Vogue Efi. I've driven up from Hampshire in my equally original 1994 300Tdi, which is by far and away the tattiest vehicle here. And esteemed Editor Patrick has borrowed a brand-new Range Rover P400e from JLR for the day, given that he hasn't yet joined the exclusive band of brothers and sisters that own first-generation Range Rovers.

Well-known Range Rover enthusiast, photographer and LRE London senior instructor Peter Robain is looking after us and, suitably refreshed with coffee and biscuits, we are soon on our way to the purpose-built off-road technical site. The fog is lifting and it looks like it will be a lovely day, although the thick ice on the puddles and the rock-hard mud will take a while to thaw. We only have a couple of hours before LRE's customers will be arriving for their off-road driving courses, so there's no time to waste.



Unrestored Range Rovers as good as this are a rare find



Proud owner Will Meacham says WBH is a keeper

Will Meacham:
1990 Range Rover Vogue EFi

"I have been an obsessive Range Rover fan for years," says Will Meacham. "Many other Land Rover models don't work for me because I'm six feet four inches tall, so Range Rovers are really my first love. I found my first one in Spain around six years ago. It was owned by an ex-pat and had been off the road for a while but it was cheap, so I bought it. But like many Range Rover enthusiasts I quickly discovered that one isn't enough!

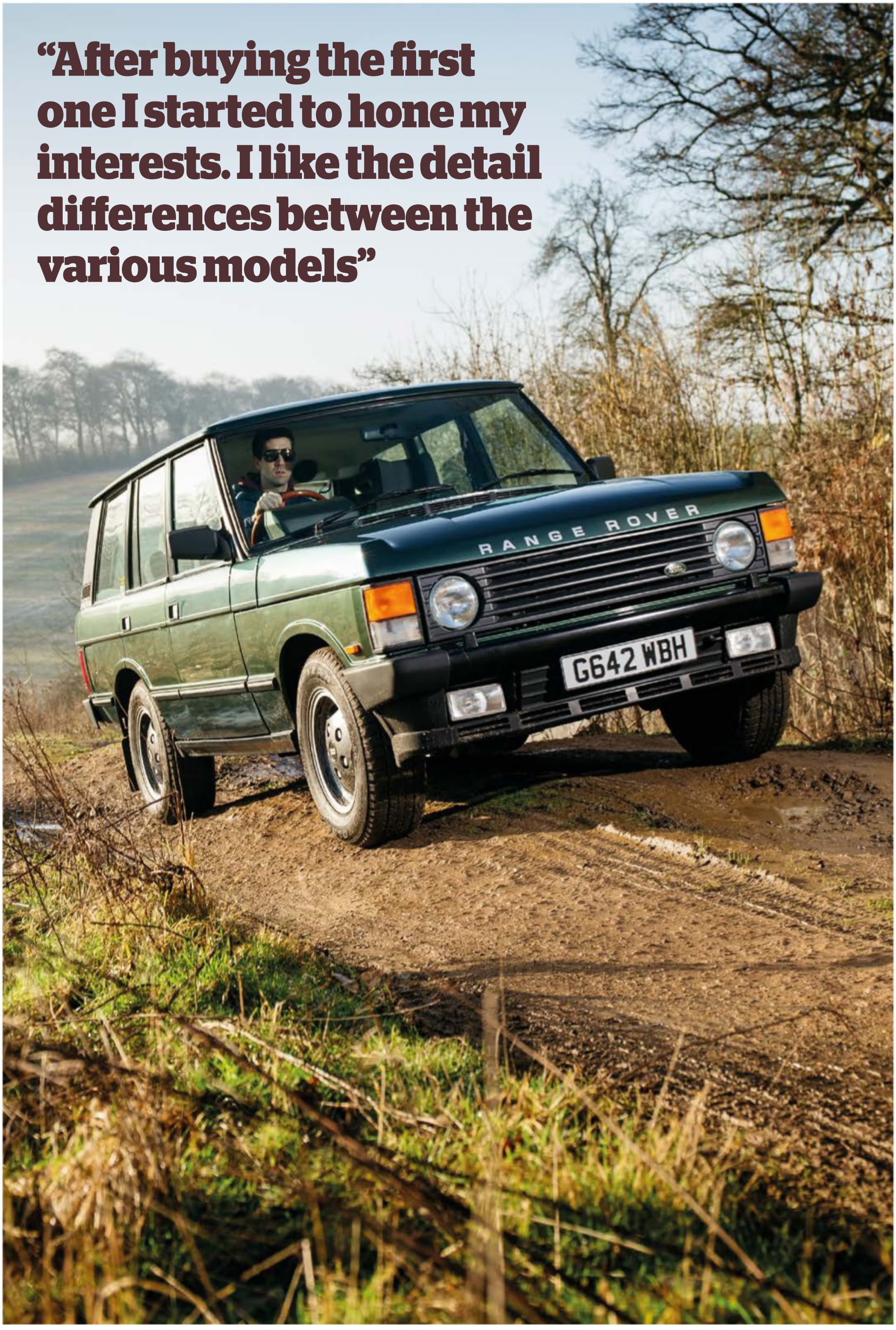
"After buying the first one I started to hone my interests and become more selective. I like the detail differences between the various models and I now have two 4.6 P38s and four classic Range Rovers, including a restomod vehicle based on a 1988 four-door which is fitted with a 4.2 engine and Janspeed exhaust. I also have a Discovery 2 which is my daily driver."

I am particularly keen to see G642 WBH because I have to confess that I once owned it, and I bought it for exactly the same reasons that Will did – it is original and unmolested, with very low mileage and in exceptional condition. The only issue was that I already had one exactly the same, and I concluded that I didn't need two!

"It has exceptional history," says Will. "The first owner was a Greek shipping magnate but when he sold it in 1998 it still had only 7000 miles on the clock. The next owner cherished it to an amazing degree, with oil changes and services every few thousand miles. When he sold the car in 2011 it still had less than 53,000 miles under its belt, and during Gary's years of ownership it was mostly in store.

"When I bought it there was very little to do to recommission it and it has been extremely reliable," says Will. "I don't use it as a daily driver but of all the Range Rovers in my collection, this one is a keeper! The originality and low mileage are huge plus points and it really does drive like a new car. I was delighted recently when I was approached by a company involved with a major Netflix production, looking for an original green Range Rover. WBH has already spent a day or two on the film set and is due back again shortly. I'm sworn to secrecy so I can't tell you the name of the series, but you can probably guess!"

“After buying the first one I started to hone my interests. I like the detail differences between the various models”





Philip Cook:
1993 Range Rover LSE Autobiography

PHILIP Cook's LSE Autobiography is beyond mint. I admire him hugely for bringing it down from Northampton on such a damp day, with the roads covered in salt. "It is my third Range Rover," he says. "It was six months old when I bought it and it was our main family transport for many years. Gradually it fell into disuse as newer vehicles took over but by then I had decided that it would be restored. After all, only 25 were made and although I've owned Range Rovers since 1987, none were quite as special as the Autobiography."

Sensibly, Philip started amassing the parts he needed when they were still relatively plentiful and cheap. The restoration finally got underway in 2010 when, after a lot of research, Philip entrusted the job to Paint-Tec in Northants, having been highly impressed by their work.

Philip Cook oversaw the fastidious restoration to perfection

"The car was stripped to the last nut and bolt," says Philip. "I wanted the restoration to be faithful to the original but I also wanted to extend the bespoke theme that's at the heart of an Autobiography and personalise the vehicle to reflect my own ideas. As the work got underway I also remembered that just before I'd taken the car off the road a factory recall had been issued regarding the fuel tank. For one reason or another I never got around to taking the car to a main dealer at the time, so the tank was never replaced. Once the rolling chassis was completed I went to the main dealer in Northampton and explained the situation, and I was very impressed when JLR agreed to install a new fuel tank free of charge!"



British Racing Green was the original colour

The rebuild was finally completed in 2017 and the result is astonishing. Philip's bespoke additions include an engine remapped to 265 bhp, stainless fixings throughout, a hand-built custom exhaust that leaves you in no doubt what's under the bonnet, a bespoke sound system and many upgrades to the trim.

A glance under the bonnet reveals stainless exhaust headers with a blue ceramic coating, blue silicone hoses and plug leads. Belatedly, I realise the significance of the blue and the personalised number plate, because Philip is a lifelong Tottenham fan.

The car has become a popular feature at shows and has appeared at Land Rover Legends, including being shortlisted for the National Awards. It has also appeared at Silverstone, the NEC, Beaulieu and the London Classic Car Show. As Philip says, "I never really planned to show it but organisers seem keen to have it!" A testimony to the quality of the restoration.

“The car has become a popular feature at shows, a testimony to the quality of the restoration”



Autobiography LSE was top of the range in 1994, and still very impressive today

Patrick Cruywagen:
2019 Range Rover P400e

PATRICK has never owned a Range Rover but has confessed to a hankering for a Classic. But he's always been unimpressed when I've told him about some of my low-teens mpg experiences in early V8 vehicles and he thinks my Tdi makes a lot of sense as a daily driver. "If I had a classic it would be a Tdi for reliability and economy," he says. But since he doesn't have a Range Rover he's had to borrow one for our photoshoot and JLR came up trumps with a P400e that, if he were tempted, would set him back a cool £89,300. So what does he think of it?

"I feel like the odd one out as I'm driving the new kid on the block, a 2019 Vogue 2.0-litre petrol PHEV. Now before you get excited about the PHEV (plug-in hybrid electric vehicle) it only has a range of 25 miles in full EV mode. My son calls this the stealth mode and just before arriving at school he would push the EV button so the teachers and his mates wouldn't hear us arriving. That's what it's for, right? However, when driving it like you stole it good luck with getting 25 electric miles out of it. When are JLR going to join Nissan and Tesla and give us a fully electric car? Or is it impossible to do with something of this size that weighs 2.5 tonnes?

"I've driven 400 miles in it but only managed 25.4 mpg, which is better than my straight-six Defender, I might add. My mother-in-law thought she was the Queen when I picked her up at Luton airport and she could not have been in a safer, more comfortable car when we made our way home during Storm Ciara. Despite its engine size it still packs a powerful punch, delivering a whopping 404 bhp at 5500 rpm and zero to 60 in less than seven seconds. So no problems in the performance stakes.

"The most impressive thing about this Range Rover is when taking it off-road. Even with its road bias 21 inch wheels and Pirelli Scorpion Verde All Season tyres it still performs. My mountain bike has more aggressive tyres on it. Everything it does off-road is with grace and poise. All I had to do was put it in neutral, raise the ride height and select low range. The off-road electronic systems do everything for you. Before my days at LRM I drove many luxury SUVs such as the G-Wagon, Audi Q8 and BMW X5. None of them come close to a new Range Rover. Just ask the Queen or my mother-in-law."



300Tdi is cheap to run and exceptionally reliable



Odd man out ponders the pleasures of the PHEV

Gary Pusey:
1994 Range Rover Vogue 300 Tdi

"I'VE done my best to spruce-up the Tdi for its big day out, but it is rather care-worn and there's only so much I can cope with on the car cleaning front before I feel a desperate urge to do something else! I've owned the Tdi since 2014 and there was only one owner before me. He was a director of Shell who had it from new as his company car and took it with him when he left the company just a year or so later.

"It was obviously cherished and saw very little use because when he traded it in with the same dealer who'd supplied it 20 years previously, it had only done 112,000 miles. That's an average of less than 6000 miles a year. Its service history is incredible with annual services regardless of mileages, and whenever anything needed doing it was done, whatever the cost. It was immaculate underneath with none of the usual frilly bits.

"The Land Rover retailer took it in part-exchange for a new L405 but didn't really know what to do with it. It was too old to go on the forecourt but far too good to disappear into the trade. A friend was tipped-off about it and bought it, knowing that I'd be interested in it. I was!

"It has proved to be the best Range Rover I've ever owned and is now approaching 200,000 miles. It is still my daily driver and for several years was the vehicle of choice for our family holidays. It's been exceptionally reliable and only let me down once when it blew a top hose in County Waterford as we were racing to catch an overnight ferry. Wife, daughter and dogs were not impressed.

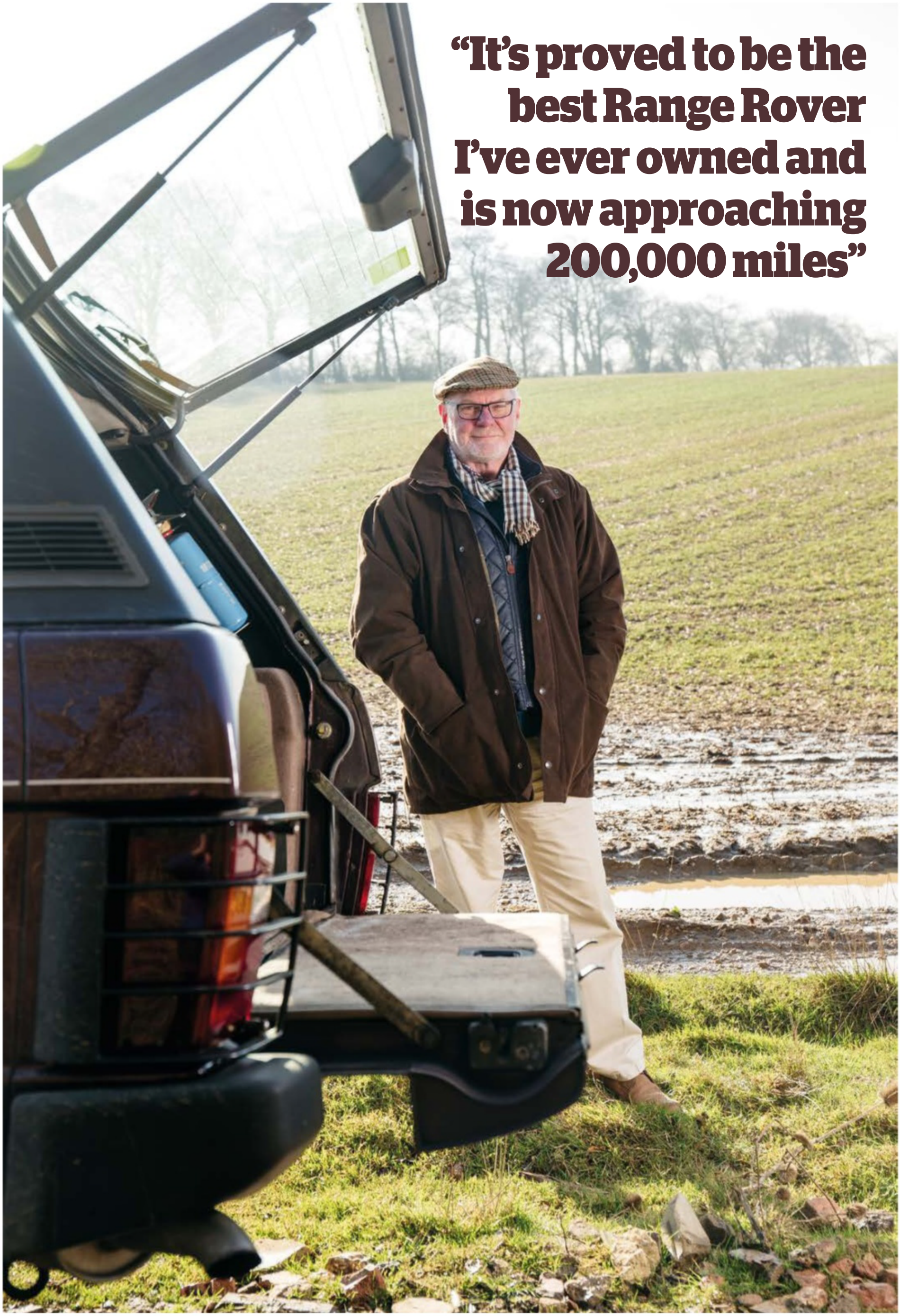
"And it's at times like that when you realise that keeping a classic Range Rover on the road is not always easy. There was only one 300Tdi top hose in the Republic and I had to book the family into a hotel for the night, rent a car and set off on a five-hour round trip to Dublin to buy the hose. Some parts are totally unobtainable, though, as I discovered when I turned into the driveway at home one day and found the brakes had disappeared. Tracking down an ABS pump was not easy and the car was a useless paperweight for a week until a second-hand pump was located. But it's cheap to run and I get to enjoy driving a classic Range Rover every day."



Land Rover Experience, London

LRM would like to thank Richard Beddall at LRE London for allowing us to use their wonderful site at Luton Hoo for our photoshoot. You can find out more about their range of experience drives by contacting them on 01989 770932 or by email at london@landroverexperience.com

“It’s proved to be the best Range Rover I’ve ever owned and is now approaching 200,000 miles”



KINGSLEY

RE | ENGINEERED RANGE ROVERS











UNIQUE OPPORTUNITY TO AQUIRE THIS

1970 'VELAR' PRE-PRODUCTION RANGE ROVER

Sympathetically restored retaining many of the original features. One of only 26.

Guarantees VIP entry to all of this year's 50th Anniversary Range Rover Celebrations.

All of us at Kingsley share a common love for classic Range Rovers and Land Rovers having grown up with them around us. We have been restoring, creating 'Ultimate Classic Rangies', and supplying parts and upgrades for more than 20 years to clients around the world.

Please see our website for full details of this vehicle and our other classic Range Rovers for sale.

Tel: +44 (0)1865 884 488 www.kingsleycars.com

SOUTH WEST RUST PROOFING

Unit 16, Woodland Industrial Estate,
Eden Vale Road, Westbury,
Wiltshire, BA13 3QS

0333 577 4941

info@southwestrustproofing.co.uk

Dinitrol approved workshop for 5 years

Thorough 3 day treatments available for all vehicles

High quality, professional and friendly customer service

Prices for Land Rovers start from £625 +VAT



Our treatment package includes the following as standard:

- A pre-treatment (pre-booking) vehicle inspection by a rust-proofing technician.
- Saturday to Saturday delivery and collection of your car, meaning no need to take time off of work.
- A free (manual) Courtesy Car
- All internal panels, chassis box section and sub frames are treated with Cavity Wax (no hidden charges!)
- Full underbody treated with Dinitrol[4941] underbody wax and wheel arches treated with Dinitrol[445] stonechip
- 60+ images taken before, during and after the treatment which is provided by website link
- Final treatment walk through with a rust-proofing specialist when you collect.
- The first yearly inspection and treatment top up is free



WWW.SOUTHWESTRUSTPROOFING.CO.UK

EXTREME4X4

Suspension - Protection - Recovery

GO EXTREME!



EXTREME DISCO 2 REAR BUMPER



With 2 Hi-lift jacking points and a central swivel recovery eye. Available with or without light apertures for OE Land Rover light clusters.

EXTREME DISCO 2 FRONT QD BUMPERS



Bumper plus QD receiver with provision for 2 swivel recovery eyes and 2 built-in Hi-Lift Jacking points. Choice of driving or fog lights (included).

EXTREME DISCO 2 QD RECOVERY POINT



Takes less than a minute to change from fixed drop plate to the optional jaw/nato hitch, bow shackle and receiver hitch. For Def, RRC Disco 1&2.

EXTREME DISCO 2 STEERING DAMPER



Designed to reduce steering vibration, "Bump steer" and steering snatch in off road conditions.

- White Powder Coat finish.
- Solid 20mm S45C steel shaft chrome plated for extra long seal & shaft life.
- Incorporates the "Hallite" seal.
- Teflon piston seal.
- Race proven.
- Fitted with standard bushes.

EXTREME DEFENDER WINCH BUMPER



Choose from the Competition version, the Extended version (for use with full size intercoolers) and the Air Con version for 90/110/130.

EXTREME NAS STEPS WITH QD RECEIVER



*optional accessories shown.

Built in quickly detachable receiver point. Two built in Hi-lift jacking points. Available for LR 90 & 110 CSW, Hardtop & Double Cab Pick Up.

EXTREME COMPETITION DAMPERS



The remote reservoir works gives better performance and service life to the damper in extreme driving conditions.

- Solid 20mm Chrome plated steel shaft.
- 52mm diameter steel body - bored and honed.
- Incorporates the "Halite" seal.
- 600mm Stainless steel braided hose with steel swivel fittings.
- 52mm steel remote reservoir.
- Nitrogen gas charged from 60 psi to 200 psi.

EXTREME DEFENDER TUBULAR BUMPER



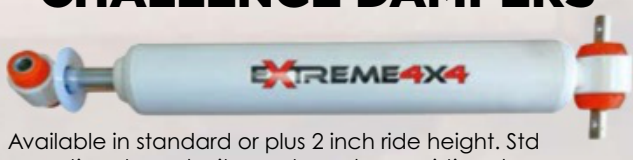
Suits Defender 90/110 & 130. Powder coated for long life with a aluminium trim plate. Provision for optional swivel recovery eyes (available separately).

EXTREME NAS REAR BUMPER TOW STEP



Built in towing point and step. Choice of anodised, standard or black chequer plate. Two built in Hi-lift jacking points.

EXTREME DISCO 2 CHALLENGE DAMPERS



Available in standard or plus 2 inch ride height. Std mountings to make it easy to replace existing dampers.

- Fitted with genuine Polybush.
- White Powder Coated finish.
- Solid 20mm S45C steel shaft chrome plated for extra long seal and shaft life.
- Twin tubed 46mm bore with 52mm dia outer case.
- Incorporates the "Hallite" seal.
- Teflon piston seal.

EXTREME TANK GUARDS



Wide range of Tank Guards available in alloy or galvanised steel. For All Defender 90/110 side and rear mounted tanks. Discovery 1 & 2.

EXTREME CORNER BUMPER STEPS



Zinc powder coated corner bumpers with alloy tread plate step for 90 & 110. Available with standard, anodised or black chequer plate.

EXTREME RAID DAMPERS



Designed for off road as well as fast road use. Complete with standard mounting & will require Extreme tubular front turrets.

- Solid 20mm Chrome plated steel shaft.
- Black anodised billet alloy fittings.
- Incorporates the "Halite" seal.
- Nitrogen gas charged from 60 psi to 200 psi.
- 52mm diameter steel body - bored and honed.
- Available in standard height, +2'' and +5" lengths for Defender, Disco 1 and Range Rover Classic.

EXTREME STEERING GUARDS



Large range available incl. Galvanised Steel Defender Guard with built in Shunt Receiver and the 8mm Alloy Steering Guard for light off roading.

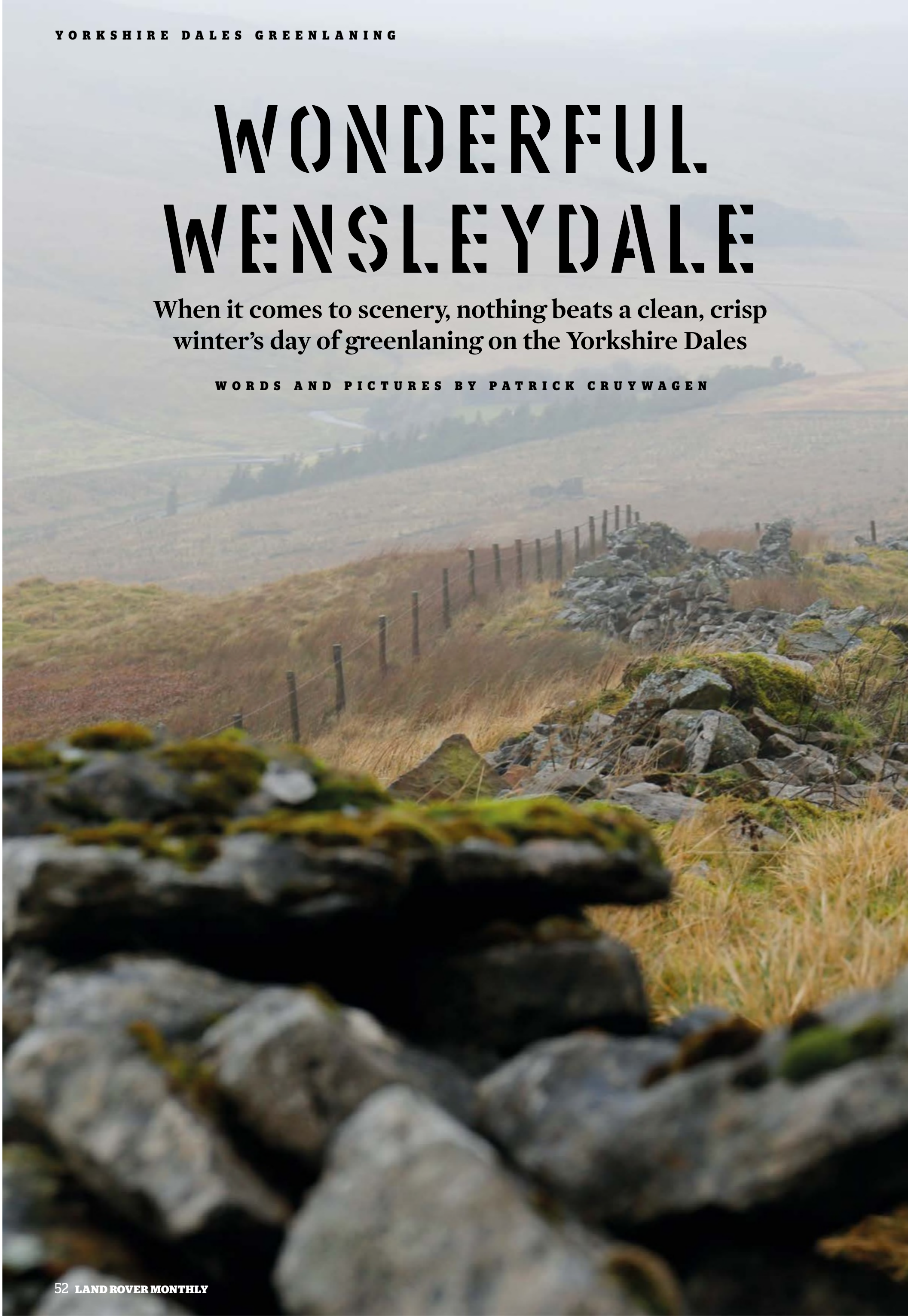
1000'S OF PRODUCTS ON WWW.EXTREME4X4.CO.UK

E&OE. sales@extreme4x4.co.uk Tel: +44 (0)1206 868 411 Open Mon - Fri 9-5pm

WONDERFUL WENSLEYDALE

When it comes to scenery, nothing beats a clean, crisp winter's day of greenlaning on the Yorkshire Dales

WORDS AND PICTURES BY PATRICK CRUYWAGEN



IF I can give you one tip only for when you go greenlaning on the Yorkshire Dales, then that would be to make sure that you are not in the co-driver's seat of the first vehicle. Why do I say this? Well, you will open and close more gates than the busiest gatekeeper in the world. I was in the gatekeeper's seat of Russ Dykes D4. Russ is the highly experienced guide from Ardventures. He is a local lad and I would describe him as your average grumpy Yorkshireman who has an above average knowledge of the lay of the land. Russ also does guided trips to Europe and Morocco. You won't go wrong if you acquire his services.

After spending a comfortable night at Leyburn's Golden Lion Hotel, it was only a mile or two to the start of our first lane. We have four vehicles in our convoy. As mentioned Russ is in a bright red tricked up D4. Rob O' Neill and Andy Mosley are in a black Defender 90 while Phil Gibbons is in a grey Defender 90. It's also called the coffee truck as Phil actually uses it as a mobile coffee bar at events. I hope to do a trip with him again in the future as he makes mighty fine coffee. Finally, Kevin Gascoigne and his wife Sophie are in a Range Rover L322 V8. He is definitely in the most comfortable vehicle of us all.

The first half of the lanes for the day are in northern Wensleydale while Russ promises that in the afternoon we will do some of the lanes found in the south.

To get to our first lane we pass through what Russ calls one of the largest military training areas in all of Europe. Soon it will only be one of the largest military areas in the UK. I notice several rifle ranges to the left and right of us. Our first lane is on classic grouse moor. All around us are



"The rocks are sharp and jagged but thankfully the L322 has decent wheels and off-road tyres"

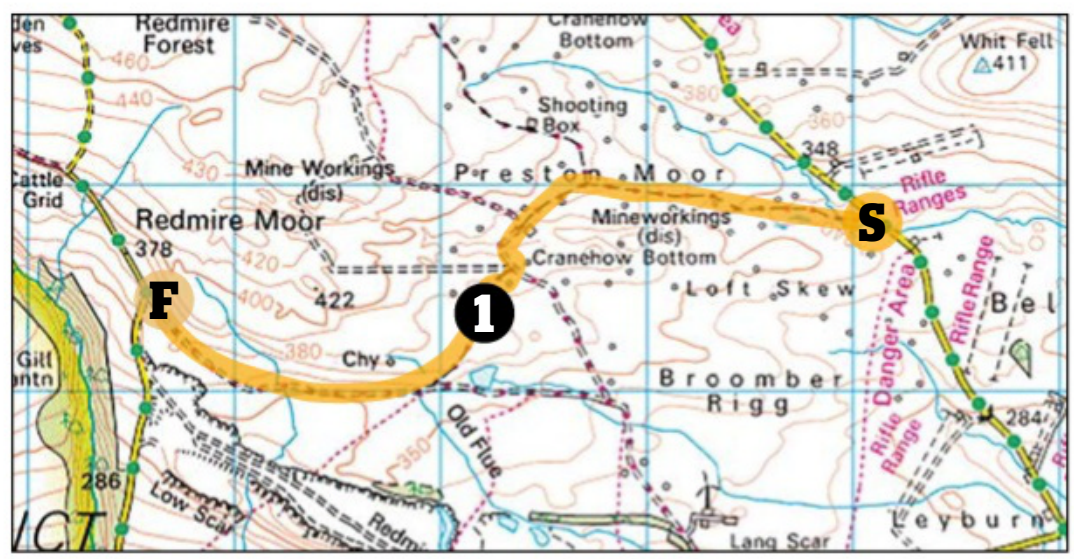


Recent flash floods made things wet

Sharp and jagged rocks test the tyres

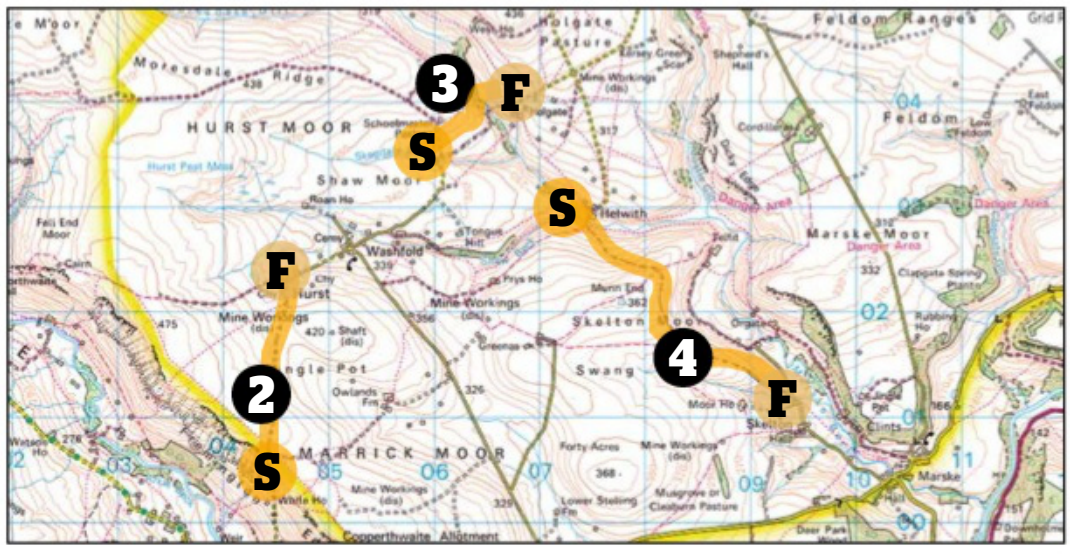
signs that this used to be a tin mining area. The lane is not technical though the recent rains have made a few puddles. God rewards us for the early start and the sun's golden rays start to paint the landscape yellow all around us. What was dull and dark a minute ago now becomes bright and beautiful. The lane has been well maintained by the local council and we drive over thousands of golf ball sized rocks. Russ slows down to let a pair of grouse pass in front of us.

To get to our second lane we pass through Reeth, a town badly affected by recent flash floods. Things must be getting serious because Russ puts his D4 into low range. The lane is best described as one long climb with a couple of gates. After the first gate Russ tells the Defenders to engage their centre-diffs. The rocks are sharp and jagged, thankfully the L322 has decent wheels and off-road tyres. Once at the crest of the climb the lane becomes easier to negotiate. Far in the





Owner of coffee bar Phil can come again





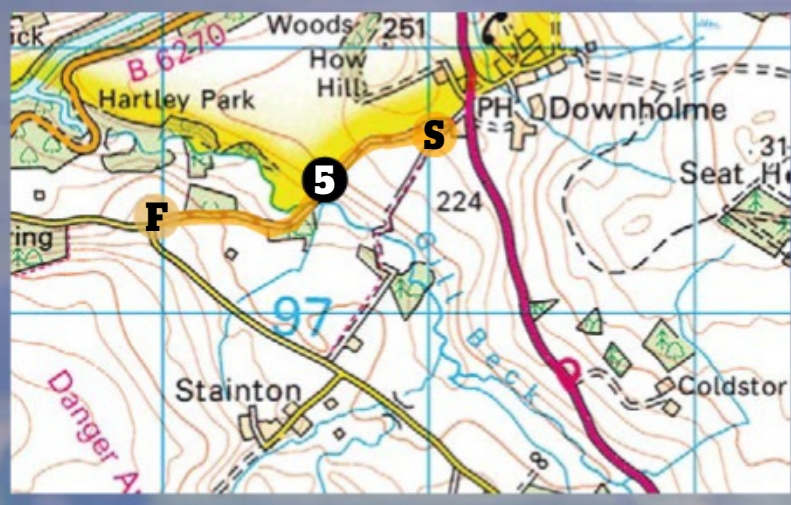
distance to our right is Rutland Rigg and the North Yorkshire Moors. As we make our way down to the end of the lane the rocks get a little bigger. The D4 is just awesome on terrain like this and seems to take it all in its stride.

After a short transit we start lane 3 (Schoolmaster Pasture). As someone originally from another continent, I still smile when driving in a 4x4 past an 'unsuitable for motors' sign. The lane is another classic for off-roading, lots of deep ruts so the Defenders need to take the correct line to save their diffs. There are a few tight switchbacks to negotiate as we make our way down. Some Welsh idiots on dirt bikes are tearing up a poor farmer's hill. We stop and tell them what they are doing is illegal but they argue with us. We push on along the boulder-strewn climb.

According to Russ Lane 4 has become somewhat 'sanitised' over the years. There is a water crossing to negotiate after passing through the farm at Helwith. Then we start the climb along the sanitised road. Russ starts to reminisce. "During the Nissan Navara launch here three years ago this track was almost impassable and very dangerous. They had to close it for a week to do some repairs. Now it is like the M1 for Land Rovers." Once we reach the top of the climb I can literally see why he still does this lane. The views are spectacular. As we make our way down the rocky decline it feels as if we are driving a drone and not in a Land Rover. This is Yorkshire laning at its very best.

To get to our fifth and final lane before lunch we pass through the village of Marske. The tree-lined lane starts with a rocky decline and it also has some ruts. As with many UK lanes the highlight is without a doubt the river crossing.

For lunch we head back to Leyburn for a generous serving of soup and thick slices of fresh bread at a local tea shop. After lunch we head to the southern part of Wensleydale for our final four lanes of the day. It's as if God has flipped the weather switch for the afternoon session. Sunshine is replaced by wind, sideways rain and mist. We pass through the villages of Bainbridge and Hawes to get to our sixth lane, the Cam High Road. It's a bumpy and rocky track but we stay in high range. Russ remises about when it still had big rocky steps. There are still some smaller and slippery steps to



"The views are spectacular. This is Yorkshire laning at its very best"



Rocky climb seems to go on forever

negotiate so it's not all sterile and non-challenging. At one of the steps we all have to keep well left to avoid rolling down a very steep slope. Once the time comes to tackle the long decline we opt for low range. It's very bumpy and the tomato soup that I had for lunch starts to repeat on me. I am just being dramatic and so I pause to take in some of the spectacular Yorkshire Dales landscape instead.

Our seventh lane, Beggars Lane, is along an old Roman road. It's not technical at all and by now the thick mist has moved in and we can't see much in terms of views. The one great thing about the two afternoon lanes that we have done so far is that they were both fairly long.

Lane 8 starts at Marsett, where there are lots of old cars and farm implements littering the area. It's a farm track really with walls on both sides. I see a sign for the bordering Semer Water Reserve. Guess what? A very long and enjoyable water crossing follows next. An easy climb takes us to end of the lane at Stalling Bank. The light is fast fading as we enter our final lane of the day. It starts with a very long rocky climb that seems to go on for ever. The rocks do get smaller in size the higher we climb. We turn left at the summit but you can also go right. It's easier the way we are going, downhill to the finish of the lane. Russ shows us a privately owned campsite next to the water. You have to be totally self-sufficient there. The only ablution is a big body of water. What more do you need?

The light is gone and our day of laning is over. It's been another goodie thanks to Russ and Ardventures. If you want to explore the Yorkshire Dales and don't know where to go why not book a trip with Russ?

Thanks to local lad Russ Dykes from Ardventures for expertly guiding us around the Yorkshire Dales. Russ is an experienced 4x4 driver and teacher. He not only does guided trips in the UK but also to Europe and Morocco. For more details see ardventures.co.uk

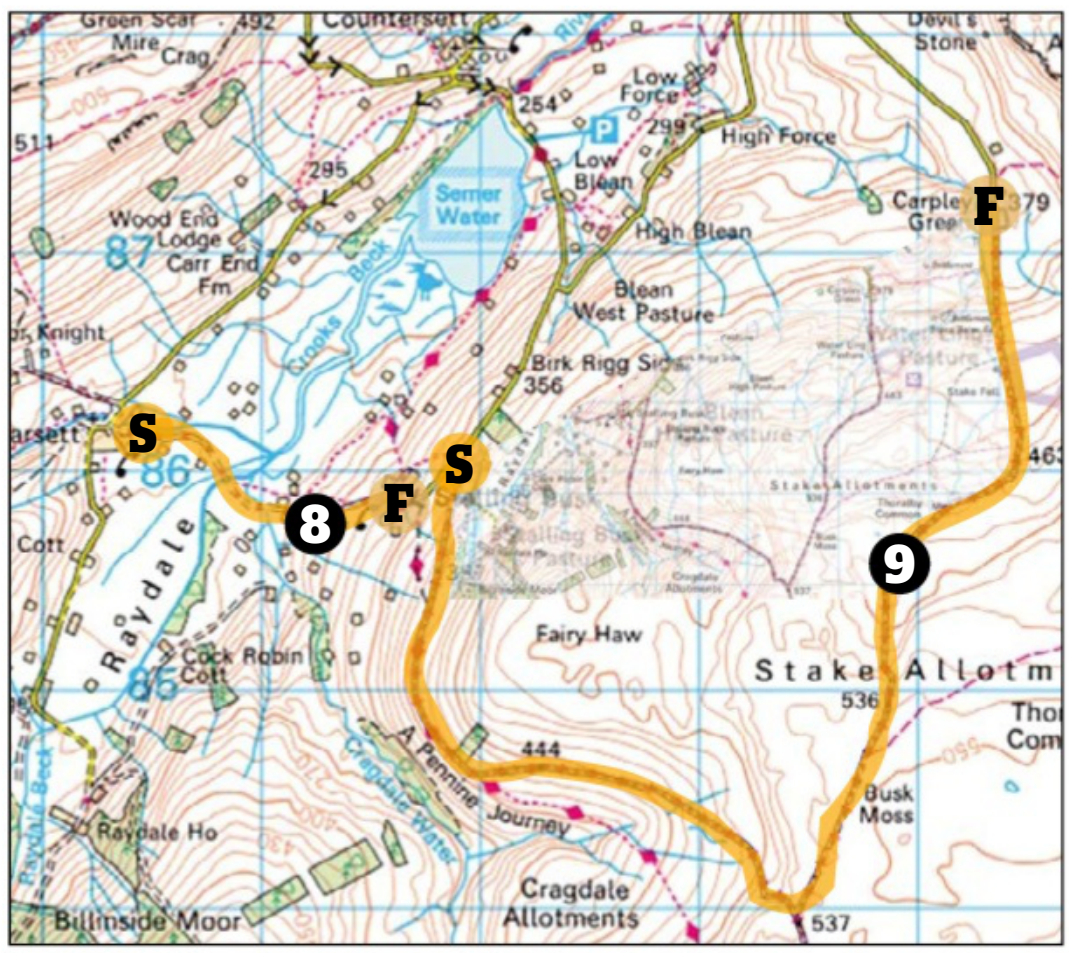


Where we stayed

GOLDEN LION, LEYBURN
Great breakfast and good ales. Room was comfy and reasonably priced. A great place to stay of doing the lanes we did. For more details see goldenlionleyburn.co.uk







ARDVENTURES

BALKANS – 11th – 24th JULY 2020

The Balkans is one amazing "Grand Tour". We meet in Ljubljana, the capital of Slovenia, then it's on the road and trail, 4 capital cities, 5 countries, leaving Europe behind you enter a different world that in places appears to have stood still. This is a hotel based holiday, staying local in family owned hotels where possible, and the final evening we check into the NH Hotel Trieste, for our last farewell meal together before heading home. Please allow 2 days to get to Slovenia and back from Italy, an ideal time to extend your holiday? Price includes all hotels bed and breakfast from Ljubljana to Trieste and your Dover/Calais ferry.

"Step back in time" from the seat of your 4x4 and travel through the Balkans with your expert guide leading you.

Total miles on the trek - 1800. Of which 450 approximately on the tracks

- Suitable for Land Rover Defenders, Freelander, Range Rovers.
- Not a technical 4x4 trek, more about stunning scenery, visiting the real Balkans back waters, seeing the remnants of the Balkans war.
- £3,450 only 4 places available.

TESTIMONIAL

Looking back at my old diary, it was this time last year that my wife and I booked our 2019 trip to the Balkans with Russ. We've been on a few trips overseas with Russ and Ardventures now, and the Balkans was one of the best. Each trip is different, but for variety of cultures and countries experienced it can't be beaten. In addition to Croatia, Serbia, Montenegro, Bosnia and Slovenia we took the opportunity of spending additional days in Austria and Italy while travelling to and from the tour. More of a road tour than hard core off-roading, there remained a wealth of tracks and mountain trails to enjoy. We especially enjoyed the variety of terrain in Montenegro. Some of the views are breath-taking. Thoroughly recommended!

SIMON & TRACY HALES







PYRENEES – 6th-21st JUNE 2020

Russ has been going to the Pyrenees once or twice a year since 2012, and it's become one of his favourite treks. It's a tale of two halves;

Week 1: Navarre & Aragon

Week 2: Les to Andorra

Or why not do both?

The weeks are 2 totally different areas;

Week 1 enjoys a start in the famous town of St Jean Pied de Port and works its way through the desert area of the Bardenas Reales region and into the mountains for your final evening in the fortified village of Ainsa. Hotel based, fabulous family-run hotels with backdrops to castles and deserts

Week 2

It's up high working our way through the Val d'Aran valley until the final day with a run through the smuggles route into Andorra - the views are staggering, with many of the colls still having the remnants of the winter snows. Lunch stops in old retreats, Tapas in the towns and brilliant hotels along the way, with your final night in Andorra itself before the journey back to the ferry .

Week 1 £2595 including Portsmouth/Santander Ferry, Hotels B&B.

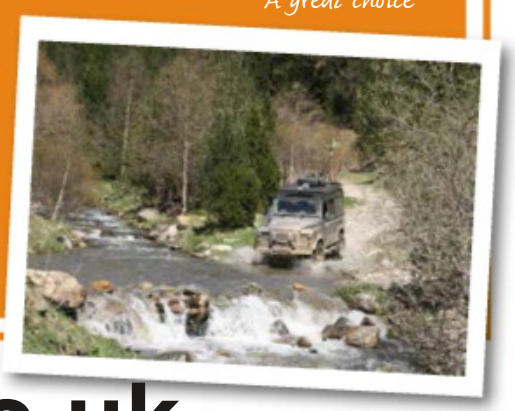
Week 2 £2595 including Portsmouth/Santander Ferry, Hotels B&B.

Or enjoy both weeks for £3750 including ferries and hotels.

TESTIMONIAL

I wanted the chance to drive my Defender off road "properly" and the week in the Pyrenees with Ardventures fulfilled this. Several hundred miles on tracks and trails plus climbing and river crossings. Having Russ as team leader and with radio contact between cars we got really good help and advice to get us through it all. Being told "low ratio, second gear, diff lock..... now go" was just what we needed. A great choice of regional hotels and restaurants you would never find if you travelled alone. The 110 was even better than I imagined, we shared the driving and had a great time. Thanks to Russ and our fellow drivers for making the week so enjoyable. We are already planning what we do next. Nicola has got our tent and air beds out of the garage!

RICHARD



email: sales@ardventures.co.uk

www.ardventures.co.uk

MOROCCO ALPS GALICIA PYRENEES BALKANS CARLTON TOWERS 4X4 EXPERIENCE CENTRE

BORN TO OVERLAND

VISIT WWW.OVERLANDGEAR.UK



BORN TO ROAM

ROOF RACKS, ACCESSORIES, CAMPING AND STORAGE
VERIFIED FRONT RUNNER DEALER WWW.OVERLANDGEAR.UK | tel. 01461 701196

FRONT RUNNER

THE UK'S BEST USED CAR WARRANTY

INCLUDING **ROADSIDE ASSISTANCE & RECOVERY!**

Warrantywise

WHY WE'RE THE BEST...

- YOU GET UNLIMITED REPAIRS
- CAR HIRE & ONWARD TRAVEL INCLUDED
- PARTS AND LABOUR COSTS COVERED
- 30 DAY MONEY BACK GUARANTEE

WE GUARANTEE TO BEAT YOUR RENEWAL OR YOU GET £20

GET A QUOTE NOW!

Gold Trusted Service Award 2020 feefo

AUTO EXPRESS RECOMMENDED

Visit **warrantywise.co.uk/LRM** or call **0800 121 4770**

Terms and conditions apply. Accurate at the time of printing.

Land Rover Rummage

SUNDAY 17 MAY 2020

Includes admission to
SPRING
Autojumble
16 & 17 May 2020



2 FOR 1 OFFER

Free rummage stand at Simply Land Rover on 12 July when you book your stand at Land Rover Rummage.

Terms and conditions apply, see website for details.

Be part of the action:

beaulieuevents.co.uk

01590 614614 New Forest | Hampshire | SO42 7ZN

Beaulieu

BAD BOY CLASSICS

Seats from just
£299.95
PAIR

A DIRECT FIT FOR:
LAND ROVER
DEFENDER



Sub-frames
£79.95 PAIR

Off-road in comfort

BB SEATS

A wide variety of colours in stock!

Also available heated!

Visit our new warehouse outlet open to the public just off junction 9 of the M1

01442 219145
www.bbclasssics.co.uk

Unit 2, Lantern Commercial Centre, London Road, Flamstead AL3 8HG



THE TRUTH ABOUT NITRA

LRM takes an exclusive tour of Jaguar Land Rover's latest production facility in Nitra. This pride of Slovakia facility is the production home of the new Defender and latest Discovery. But how does it compare to JLR's other production facilities?



At full capacity they will be able to produce 150,000 Land Rovers per year

THE announcement was made exactly a year ago that the new Defender was to be built at JLR's new state-of-the-art facility in Nitra, Slovakia. It took an investment of €1.4bn to create the impressive 300,000m² facility. On October 25, 2018, production of the Discovery begun at Nitra as it was a known engineering quantity and they needed to get the factory up and running and new Defender ready. Despite the fact that JLR were the first UK car company to open a plant in Slovakia, many more from other countries, have come before them and stayed.

Did you know that since 2007 Slovakia is the biggest global producer of cars per capita? They produce an astonishing 202 cars per 1000 inhabitants. They built 1.1 million cars in 2019, which is more than JLR produced in the same year. In fact, car manufacturing makes up nearly 50 per cent of the industry in Slovakia. More importantly it directly creates 177,000 jobs and indirectly over a quarter of a million. Incredible figures really.

Despite the above facts, which I have to say I was unaware of prior to my visit, traditionalists, enthusiasts and anyone with access to social media have been quick to lambast the decision to build the new Defender in Slovakia. These are some of their more common arguments. How dare they move Defender production out of the UK? How can they lay off workers at their UK facilities but still open a facility in Slovakia? Series Land Rovers and Defenders are the cornerstone on which the brand has been built, so why move



The first plant in Europe to use the KUKA Pulse carrier system



Engines come from the UK of course

it to a country that some often confuse with Slovenia?

As I jump into a Discovery Sport at Vienna Airport and begin the 150km drive towards Nitra, I try and make sense of it all. We live in a global village dominated by corporates such as Land Rover, Coca-Cola and McDonalds. Local brands such as the BBC and Royal Mail are slowly but surely being outmuscled by global super companies such as Amazon and Netflix. They just don't have the investment or business sense to compete.

So how do I feel about the new Defender being built outside of Britain? My Manchester United supporter's jersey is made in Thailand while my iPhone is definitely not made in America. My personal Defender (the 2.8i model) was assembled and only sold in South Africa. I have lived, travelled and worked all over the world. I am a global citizen with more than one passport. The new Defender was designed and engineered in the UK and that is enough for me. It would not bother me if it was made in Timbuktu or Ouagadougou. The latter is the capital city of Burkina Faso and should not be confused with the 1980s hit Agadoo. All that matters really is that the new Defender is reliable, affordable and world-class. Or not?

Remember Solihull and Halewood are still producing hundreds of thousands of Land Rovers per year and it has become commonplace for the big players in the automotive



Guess how many types of rivets they use?



Getting ready to marry it all together



New Defender follows a Discovery on the line

industry to have production facilities outside of their birth countries. JLR have called the Nitra adventure "the latest step in the company's global expansion strategy following the opening of its Chinese joint venture in 2014 and Brazilian plant in 2016, supported by contract manufacturing in India from 2011 and Austria from 2017". It goes on to add: "The creation of new international factories allows Jaguar Land Rover to offer its customers even more exciting new models, protect against currency fluctuations and support a globally competitive business." Obviously external factors such as labour cost and a massive grant also influenced the decision to produce the new Defender in Nitra.

From the outside the new Nitra facility looks like several of those brand-new large Amazon warehouses found on the M1 near Milton Keynes except here they are virginal white and not several shades of blue. There are no Land Rovers in the staff car park so it almost feels like I am entering a top-secret weapons facility except for the one dead giveaway. Someone has parked a new Defender on a pile of rocks. It's the only external sign that behind all those white walls they plan on producing 150,000 Land Rovers per year when the facility is at full capacity. For that to happen they will need a three-shift rota, currently they are on two.

As we make our way into the main reception area and admin offices we pass the €7.5 million Training Academy, all employees who work in manufacturing go through a six-stage 12 week training programme there. It's the first time JLR has invested in this type of facility outside of the UK. Once the training is complete, the workers take up their positions in their respective workshops.



The quickest way to get round

Before taking a look at the manufacturing side of things we are first briefed by Russell Leslie, the Jaguar Land Rover Nitra Operations Director. His CV indicates a rather fast climb up the JLR ladder. There are three things that I like about Russell. Firstly, he is a real enthusiast and respects the heritage of the brand. Secondly he started



Trim and final have a whopping 250 stations



Half of the workers in Trim and Final are female



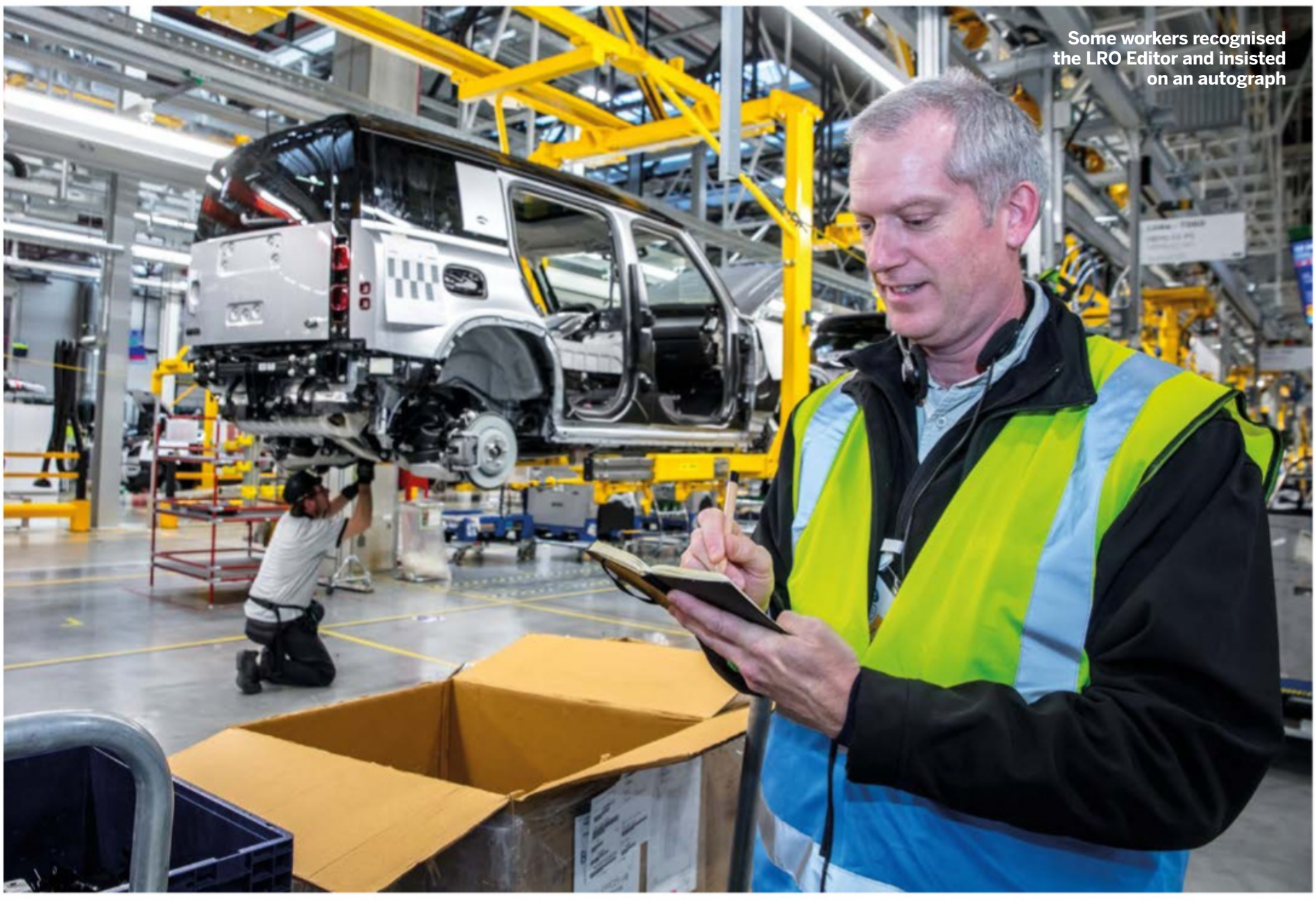
The factory has done wonders for unemployment figures in the region

out life at JLR by fitting Tdi engines into Discovery 1s on the production line. It does not get more real than that. Finally, just like me he likes rugby and travelling and will not think twice about flying across the world to watch his beloved England. I ask Russell about the pressure of building the new Defender here at Nitra. "The eyes of the world are upon us and we are phenomenally proud to be building the new Defender here. The new Defender is an incredible new product." All the Defenders that you have seen in the media so far have been prototypes. The Defenders that we are about to see on the production floor are not, they are the real deal.

Out tour starts in the impressive 90,000 m² body shop and we are led by German Christian Classon, who also helped to get the JLR facility in China up and running. Christian explains why I called it impressive: "450 people work in the body shop alongside the 624 latest and fastest robots." Yes, a Slovak robot is faster than a Solihull one. Incredibly this all used to be a floodplain and they had to raise the whole site by 1.5 metres. That took a lot of gravel. It also took 10,000 tonnes of steel to build the factory. That is the same amount used on the Eiffel Tower. Before entering the body shop we pass the bodyshell of a Discovery; it has been signed by hundreds of workers and has the date January 24, 2018, scribbled on it. That was the first ever bodyshell made in the body shop. Unlike Solihull the impressive process of pressing is done at a facility on the site next door by a contractor. Remember my earlier statement about how many people work in the auto trade in Slovakia?

JLR are massively proud of how their use of aluminium architecture has led to a weight reduction in their vehicles. This in turns has had positive spin-offs in handling, emissions and fuel usage. Christian points out a little grey box. "That prints the stickers with the VIN numbers, that is literally where every new Defender will be born." I ask him about the challenge of working with people with no automotive experience. "Yes, we have had to turn butchers and painters into automotive JLR workers but once they have been through our very good training facility they are ready."

As we make our way towards the assembly station we pass one of the 36 autonomous vehicles that bring parts to the line. When no one is looking I jump in front of it to see if it



Some workers recognised the LRO Editor and insisted on an autograph

The factory directly employs 2800 locals

will crash into me. It stops. Damn, it works.

At assemblies the underside, sides, roof and frame all become one thanks to 3600 rivets and 170 metres of adhesive beads. Did you know that there are 36 different kinds of rivets? You will be pleased to know that the glue welding technology used here produces zero emissions. This place is not like your local Land Rover repair shop. There are no sparks flying or the smell of smoke nor will you get high on the glue.

Christian explains to us that this is the first plant in Europe to be using the Kuka's Pulse carrier system which is supposed to be 30 per cent faster that the old conveyance systems. We see it in action for ourselves.

Before heading to trim and final we take a peep at the cladding line, the only manual line in the body shop. Here the doors, wings and bonnets are added. A robot helps a human to add the Defender tailgate, it measures each car first and puts it in just the right place.

Our tour of trim and final is done by their Director Ulas Bagci. It's the biggest of the three main workshops and the last stop as unfortunately we won't be visiting the paint shop. Trim and final have a whopping 250 stations and it takes up nearly half of the factory floor space. We are told that cars spend eight hours in the paint shop and then eight over here. As it's the biggest part of the operation it's no surprise that they have 1400 people working here over the two shifts, and incredibly half of them are female. One of the first things they do here is to take the doors off that they have just put on in the body shop. Why? Easy access and damage limitations. There is lots to see but it's when we stop at the marriage station that Ulas gets all philosophical on us. "Marriage is the most critical part of the process. It's where the rolling chassis and power train are married to the body. It's where the body finds its soul." Does your Land Rover have a soul?

One of the great things about this workshop is all the waste packaging is recycled while the adhesives are used to produce energy. Then in another first for JLR Ulas shows us the first in-house instrument panel and console sub-assembly stations.



New Defender at the end of the line

Soon we are literally at the end of the line, which stops for a few minutes so we can pose for pictures with the new Defenders about to be driven off. Some of the workers look a little shy but they are all proud of what is happening here. It's a region that not too long ago had double figures unemployment. Today that figure is only 2 per cent as nearly 3000 people call this factory at Nitra their place of employment. How can that not make anyone happy? They are using new technologies and systems together with tried and tested methods to build the latest addition to the Land Rover family. Or are they building a new version of an old icon? That doesn't matter. What does matter is that you needed to read the truth about Nitra.

FIRST FOUR
OFFROAD VEHICLE EQUIPMENT



Defender 'Shadow' Close-Fit Winch Bumper with A-Bar **£450**



Defender 'Air-Con Winch Bumper **£303.60**



Defender Close-Fit Winch Bumper without A-Bar **£418.80**



Thousands of parts to improve your Land Rover and keep it running at its best.



Full range of accessories to prepare your Defender, Discovery or Range Rover.



Discovery 2 Rear Bumper **£492.00**



Discovery 2 Winch Bumper with Driving or Fog Lights **£456.00**



Discovery 2 HD Bumper with Driving or Fog Lights **£444.00**

FRONT RUNNER

ARB 4X4 ACCESSORIES

SHADOW

WARRIOR WINCHES



Wide range of Defender Heavy Duty replacement Bumpers. Prices from £234

WARN

Super Pro Suspension Parts

TerrafirMa

OLD MAN EMU

YouTube

www.firstfour.co.uk

T 01404 891121 E sales@firstfouroffroad.co.uk

RELEASE YOUR POTENTIAL

- FASTER WARMUP
- BETTER MPG
- RELEASE EXTRA POWER



THE ULTIMATE ELECTRIC COOLING FAN CONVERSION

Retrofit BY REVOTEC

Revotec

Wallingford Oxfordshire. T: 0044 (0)1491 824424 E: sales@revotec.com W: www.revotec.com

A breath of **fresh air** for your Land Rover



"Breathing efficiency for your engine means more power or better fuel mileage"

> Easy fit, directly replaces standard air filter.
> Ideal for use in hot dusty conditions to reduce engine wear.
> No need to replace as easy cleaning means maximum performance guaranteed.
> Maximum breathing efficiency for your engine means more power or better fuel mileage.
> Compatible with snorkels, ideal for use in conjunction with other performance modifications.
> No compromise on quality - the engine gets more air but the dirt particles are trapped by the quality filters.
> Filters don't need pre-oiling and if the filter gets dirty there is no need to use a cleaner to clear the dirt on the filter - just use air, water or detergent.

	Corresponds To		
Series 3			
DA3138		4-cylinder - fits Zenith and Weber carbs	
DA4274	605191	LWB - 3.5 V8 - 2 filters required	1979 - 1982
Defender			
DA4269	NRC9238	2.5 petrol	1983 - 1990
DA4269	NRC9238	2.5 D & Td	1983 - 1990
DA4270	NTC6660	2.5 200Tdi	1990 - 1993
DA4262	NTC1435	2.5 300Tdi	1994 - 1997
DA4262	ESR2623	2.5 300Tdi	1994 - 1997
DA4260	ESR4238	Td5	1999 - 2007
DA4379	PHE500060	Puma	2007 -
Discovery 1			
DA4274	605191	3.5 V8 carb - 2 filters required	1989 - 1990
DA4262	NTC1435	2.5 200Tdi	1989 - 1992
DA4262	ESR2623	2.5 200Tdi	1989 - 1992
DA4268	RTC4683	3.5i V8 Efi	1990 - 1993
DA4264	ESR1049	2.5 200Tdi	1992 - 1994
DA4261	ESR1445	2.0i Mpi petrol	
DA4261	ESR1445	2.5 300Tdi	1994 - 1997
DA4261	ESR1445	3.9i V8	1994 - 1997
Discovery 2			
DA4260	ESR4238	Td5	1999 - 2004
DA4260	ESR4238	4.0i	1999 - 2004
Discovery 3			
DA3139	PHE000112	2.7 V6 diesel, 4.0 V6 petrol & 4.4 V8 petrol	
Discovery 4			
DA3139	PHE000112	2.7 V6 diesel, 3.0 V6 diesel & 4.0 V6 petrol	
DA4376	LR011593	5.0 V8 - nat. asp.	
Discovery Sport			
DA4637	LR029078	2.0 petrol & 2.2 diesel	
Freelander 1			
DA4267	ESR4103	1.8 16v	1997 - 2000
DA4267	ESR4103	2.0i Tcie diesel (Rover engine)	1997 - 2000
DA4263	PHE100500L	2.0 Td4 (BMW engine)	2001 - 2006
DA4260	ESR4238	V6 petrol	
Freelander 2			
DA4375	LR005816	Petrol & diesel	
DA4637	LR029078	from CH000001 - 2.0 petrol	

	Corresponds To		
Range Rover Classic			
DA4274	605191	3.5 V8 carb - 2 filters required	1972 - 1986
DA4272		3.5 carb V8 - cone type off-road extreme power filter 2 filters required	
DA4266		3.5 carb V8 - cone type - replaces 605191 2 filters required	
DA4268	RTC4683	3.5i V8 Efi	1985 - 1989
DA4262	NTC1435	2.4D VM Turbo	1986 - 1992
DA4262	ESR2623	2.4D VM Turbo	1986 - 1992
DA4262	NTC1435	2.5D VM Turbo	1986 - 1992
DA4262	ESR2623	2.5D VM Turbo	1986 - 1992
DA4268	RTC4683	3.9i	1989 - 1994
DA4265	ESR341	4.0i V8	1990 - 1995
DA4265	ESR341	4.2i V8	1990 - 1995
DA4265	ESR341	4.6i V8	1990 - 1995
DA4264	ESR1049	2.5 200Tdi	1991 - 1993
DA4261	ESR1445	2.5 300Tdi	1993 - 1995
DA4261	ESR1445	3.9i V8 Efi	1992 - 1994
Range Rover P38			
DA4265	ESR341	Diesel up to TA346793	
DA4265	ESR341	Petrol up to TA346793	
DA4260	ESR4238	Diesel from TA346794 up to VA376579	
DA4260	ESR4238	Petrol from VA346794 up to VA376579	
DA4260	ESR4238	Diesel from WA376580	
DA4260	ESR4238	Petrol from WA385949 up to WA410481	
DA4265	ESR341	Petrol from WA376580 up to WA385948	
DA4260	ESR4238	Petrol from XA410482	
Range Rover Sport			
DA3139	PHE000112	2.7 V6 diesel, 4.0 V6 petrol & 4.4 V8 petrol	2005 - 2013
DA4376	LR011593	5.0 V8 nat. asp. & supercharged	2010 - 2013 2014 -
Range Rover L322			
DA4378	PHE000050	4.4 V8 (BMW engine)	2002 - 2005
DA4377	PHE500021	4.4 V8 nat. asp.	2006 - 2009
DA4377	PHE500021	4.2 V8 supercharged	2006 - 2009
DA4377	PHE500021	3.6 Td8	2007 - 2009
DA4259	PHE000040	Td6	2002 - 2009
DA4376	LR011593	4.4 Td8	2010 - 2012
DA4376	LR011593	5.0 V8 nat. asp. & supercharged	2010 - 2012
Range Rover Evoque			
DA4637	LR029078	2.0 petrol & 2.2 diesel	

Images of each filter go to **www.britpart.com/filters**

Part numbers are used for identification purposes only and do not imply or indicate the Identity of the manufacturer. E&OE. Products available from your local Britpart stockist.

BRITPART

The quality parts for Land Rovers

www.britpart.com

To find your nearest stockist
www.britpart.com/distributors

24 month Guarantee BRITPART

ARDENT
Off Road







We are again running our popular Marquenterre weekend later this year, and are now offering customers the chance to visit the dunes in Northern France on either the Saturday or Sunday or both! Marquenterre is about and hour and a half from Calais. Our package includes cross channel ferries, camping near to Marquenterre and guided drives in the dunes. It's a great weekend and a good chance to experience a different kind of off road driving, suitable for all types of Landrover. Email us at **ask@ardentoffroad.com** for further details.

WHATS ON @ARDENT

ARDENT TEAM MEMBER

Jon looks after all of the technology we use, from websites to navigation, and is known as 'Q' within the company for his innate ability to resolve any technology problems in a nanosecond.



Jon's first car was a Fiat Panda 4×4, which he claims was a prodigiously capable vehicle. Until he crashed it. Since that time he has progressed through a series of Land Rover products, until recently moving to a Jeep Wrangler. Jon's favourite destination for leading tours is the Pyrenees as the variety of landscape and driving is second to none - from desert to mountains.

EQUIPMENT

If you are an Ardent Off Road customer or have spoken to us at any show you will know that we carry all the equipment on our treks! A great bit of kit we are never without is our ARB Jack! This hydraulic Jack is great for when things don't quite go to plan! **https://www.arb.com.au/recovery/hi-lift-jacks-accessories/jack/**



ARDENT OFF ROAD VEHICLE

This month we are showing you Andrew's pride and joy, his 50th Anniversary 90. Andrew has owned this vehicle for nearly two years now, having bought it from a valued customer. It leads a rather pampered life compared to the rest of our fleet, although it did see action at one of our Marquenterre weekends in 2018, where it performed admirably.





Get in touch with the Ardent Off Road team

01405 947001 or email ask@ardentoffroad.com

WWW.ARDENTOFFROAD.COM

SERIES-LY Tdi!

Appearances can be deceptive. This Series III's gleaming bodywork hides a 300Tdi engine, R380 gearbox, power steering and disc brakes upgrade

STORY AND PICTURES: DAVE PHILLIPS

IT'S dawn on the desolate north Norfolk coast and, apart from the wind off the sea and the haunting cries of wild birds, all is quiet — so quiet, in fact, that I hear the distinctive rattle of the 300Tdi engine before I see it negotiating the bumpy, muddy track across the saltings. It sounds like just another Defender or Discovery 1 heading for Thornham Harbour, but this Land Rover is very different.

The Land Rover movement is a very broad church, encompassing worshippers from all walks of life. What they have in common is a love of the green oval, although they'll invariably bicker over which model most deserves that coveted badge. Some love new Defender, some hate it. Some enjoy the comforts of the Range Rover branch of the family, others eschew creature comforts. But what they all have in common is an undying respect for the leaf-sprung original Land Rovers that were the genesis of the brand.

Who doesn't love Series motors? To dare criticise them would be like disrespecting the ancestors. It just isn't done. But just as you wouldn't take your great-grandmother

clubbing, most of us wouldn't choose a Series Land Rover as our everyday wheels. They come from another era, when traffic was slower and sparse. The 2.25 engines are slow and noisy and, even if you could reach 70 mph, the stopping power of the drum brakes would make you wish you hadn't. The lack of power steering makes them hard to handle, too. 'Not suitable for modern motoring' is the general consensus.

But the Series III now bouncing down the track towards me is more than capable of dealing with today's motoring, because it has got a lusty 300Tdi engine under the bonnet, plus all-important disc brakes on the front axle – anchors every bit as effective as those on the fishing boats moored along the harbour. Meanwhile, power steering makes it a joy to drive. It's a remarkable conversion, made all the more so because from the outside you'd never guess the mechanicals that lurk beneath that distinctive 109 Station Wagon exterior.

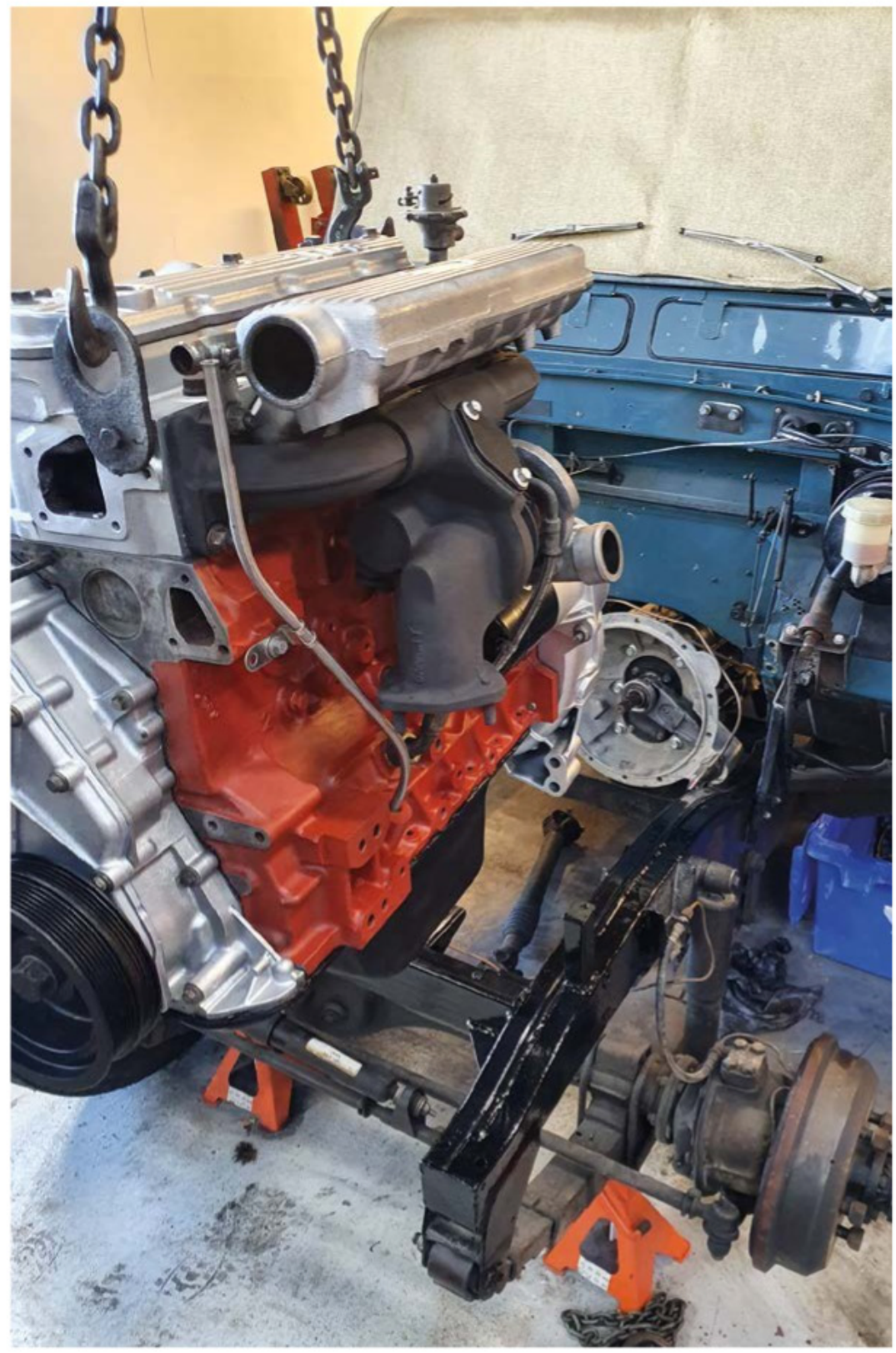
It is the work of my old friend and lifelong Land Rover fanatic, Terry Hayward. He comes from this corner of north Norfolk. His dad used to own the local garage half a mile from here and as a boy Terry loved nothing more than being in the workshop among the spanners, oily bits and Series Land Rovers — so much so, that he has spent most of the last 20 years restoring and improving them.

Yes, improving them. This may sound controversial to purists, but Terry doesn't regard every nut and rivet as sacrosanct. While he likes to keep them as original as possible, he doesn't hesitate to upgrade them where possible, taking advantage of the developments made since they were built. And when you consider that the last Series III rolled off the Solihull production line in 1985, that's a lot of developments.

The name of his company, Hayward Revive, says it all really. "Because old Land Rovers never die" is the company motto. And that's something no Land Rover fan would argue with.

The Series III Terry is driving today is a client's vehicle that he has just finished. The client is German, so it is left-hand drive, which made the conversion more difficult than usual. Unusually, the bodywork had already been restored. The owner had come to Terry for the engine and brake upgrade, plus the fitment of power steering.

"I don't know much about the vehicle itself, to be honest," says Terry. "I don't even know the year of manufacture – the owner kept all that sort of information to himself. But I do know that the vehicle had been restored to a very high standard, with clearly thousands spent on it. There was not an item that had not been restored or refurbished that we came across. The chassis was the original that had been repaired where needed, so that it kept its identity and provenance as a Series III.



Lowering the new 300Tdi engine into position



The bodywork had already been restored before Hayward Revive took their turn





Double-skinned safari roof (left) and freewheeling front hubs (right)

"The reason for the upgrade was to make it a more usable vehicle. In its original form it had a 2.25-litre diesel engine that was slow, noisy and when hitting its maximum speed of 75kmh (47 mph) the owner said it sounded like being inside a jet engine! It had the standard four-speed gearbox, with overdrive.

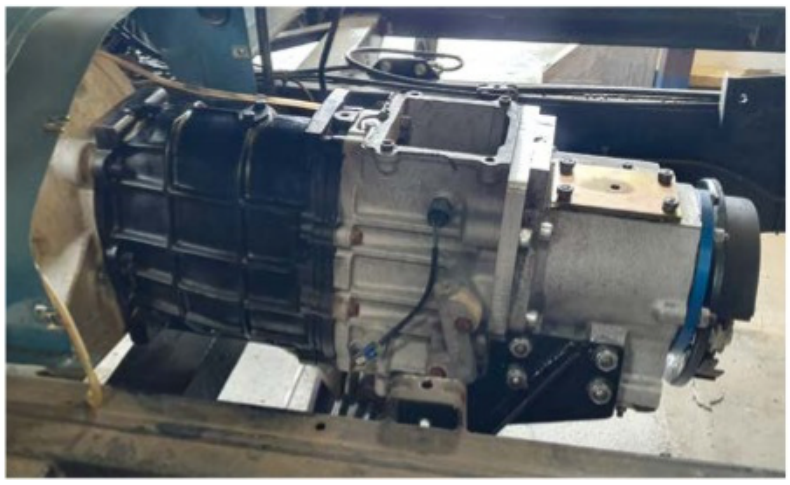
"The build was very professional, with a high level of detail. It was however all-original which most people love, although it's not necessarily my passion. Conversion to 300Tdi engine was the owner's choice, and it would have been my choice, too. Although not always considered the stronger engine [compared to its 200Tdi predecessor] by many, I reckon the 300Tdi is a lot more usable and less agricultural, as well as giving ample power and performance."

But it wasn't an easy fit, as Terry explains: "The fact that it was left-hand drive was a challenge, due to the positioning of the steering box and the fact that most of the engine ancillaries and pipework run the same side as the steering. But I love a challenge. As always, it was not a case of we can't do it, but a case of how we would overcome these issues.

"Whenever we tackle a job like this, everything is dry built, which means we can adjust and modify as we go, overcoming any issues and problems. When we get to the point where we are happy with everything, it is then disassembled and we start all over again. Every part is reconditioned or renewed ready for assembly. That way, in theory at least, we should then have no major problems when it all goes together.

"As always, I have learnt this the hard way. That's where 20 years' experience in this business comes into it. The

New 300Tdi engine in place



R380 gearbox more user-friendly than original



Brake conversion a welcome improvement

hardest part of all these jobs is not the work itself but really living up to my own expectations and what I want to achieve. I am a perfectionist and every time we do a conversion or restoration I always think: 'Maybe we should do this next time, or this could be better if we...'"

Both the engine and R380 gearbox came from a donor Discovery that had been scrapped due to the usual rust issues. Both were fully reconditioned in-house before being fitted in the Series III. "The R380 is again a much more user-friendly gearbox than both the original and the later LT77 from a 200Tdi Discovery," says Terry. "It's more work to fit, but it's worth it."

Power steering was also fitted, based on a standard Defender set-up. Says Terry: "A lot of people would opt for the [Range Rover] P38 box set-up, which works well, however the Defender route gives a neater finish in my opinion. Again all parts are fully reconditioned or new, with the steering column being a Defender unit, modified to fit the vehicle and give the correct steering wheel position. If done this way it is not obvious to the untrained eye that anything has been touched and just looks like a standard Series III interior." He's right there — it certainly fooled me. The existing suspension set-up, with parabolic springs, was retained.

Of course, turning a sub-50 mph Series III into a 70 mph-plus motorway cruiser means its stopping power had to be improved. The owner requested the drum brakes at the front should be replaced with discs. "The brakes upgrade is one of the best overall features," he says. "The original front axle is used with the only major changes being replacement swivel housings and hubs, which mount the discs and calipers.

"The main benefit of doing a brake conversion like this is the confidence it gives the owner. Not only do you have better and more positive braking, but the age-old risk of drum brakes pulling to the side heavily at the one time you rely on them most is no longer an issue. We can also convert the rear axle to disc brakes, but in most cases these retain the drum fitments."



The overall effect of engine, gearbox, power steering and brake upgrade is remarkable. Says Terry: "To drive a Series III that has been converted in this way doesn't compare to the original vehicle. There just isn't any comparison.

"The whole idea of these upgrades is to make for a more user-friendly, safer and enjoyable driving experience without taking away the character of the Series vehicles. Although the engine is a massive part of the vehicle with its extra power, the items you really notice are the steering, brakes and gearbox. Steering is positive and it moves with ease, the brakes there when needed and ready in case of any unknown danger ahead. Add in the five-speed gearbox and you no longer have that thought of 'what gear am I in and where is it?' That fifth gear gives a more than adequate cruising speed, reduced noise and better fuel economy, too.

"The whole package gives you a vehicle that will keep up and cruise with modern traffic. It's safe because of its upgrades but more so due to the fact you no longer have to drive it hard to attain a happy cruising speed, making it suitable as a daily driver if that's what you want.

"The enjoyment of driving one is immense. It will never be a Defender, but if that's what you want then you should go buy a Defender!"

Engine looks like a factory fitment – impressive considering LHD

CONTACT

haywardrevive.com or call 01328 823882



The whole conversion took Terry three weeks. The Hayward attention to detail is obvious when you pop the bonnet. The way the 300Tdi occupies the engine bay, along with the power steering and varied pipework and ancillaries makes it look like a factory fitment — all the more remarkable considering the challenge involved with a LHD model.

Having said that, this is a conversion within the scope of the home mechanic, although many will opt for the slightly easier 200Tdi swap. The biggest drawback is that the once-plentiful supply of 200Tdi lumps from early (pre-1994) Discovery 1s are now drying up. In fact even 300Tdi engines from later Disco 1s (1994-98) are getting scarcer as the years pass.

"The 200Tdi was always a more popular conversion in a Series vehicle," says Terry. "These are a very easy and straightforward fit, but I think the 300Tdi is a better engine and worth the extra work involved to ensure it fits correctly. All engine conversions should look like they belong.

"There are companies offering kits to fit the Tdi engines, which I think are fine for the DIY enthusiast working at home, but where I feel we differ is we want the conversion to fit as much as possible as if it was designed for that application, which means we go a lot deeper into the fitment process spending hours upon hours taking measurements to make sure everything fits perfectly — and of course that it can be maintained long term.".

For those who prefer to go to the experts, Terry's company, Hayward Revive, specialises in this type of project. Says Terry: "We are currently launching a whole range of options with this in mind in our Revive Classic Range. These are resto-mod vehicles, all fully restored to how we feel the Series Vehicles need to be in this modern age — and all come with the upgrades fitted to this Series III, as well as many more including various engine options."

There certainly are some interesting options, too. Remember that when the Series III went out of production there were only two models bearing that green oval: the Land Rover and the Range Rover. These days there are four Range Rovers alone! But what that means is there is a virtually limitless list of possibilities when it comes to Land Rover-based upgrades for older models.

Will we be seeing Td5-powered Series Is and TDCi Series IIIs in the not-too-distant future? I wouldn't bet against it.

HAYWARD REVIVE

Old Land Rovers Never Die





Independent Specialists in Classic Land Rover vehicles, Norfolk

Restorations – Recommissions – Conversions

www.haywardrevive.com

Hayward Revive
Unit 1, Creake Business Park South Creake, Norfolk NR21 9JB
01328 823882 enquiries@haywardrevive.com

TRY 5 ISSUES OF Land Rover Monthly FOR JUST £5



Visit: **www.mymagazinesub.co.uk/land-rover/promo/lrm/apr20/**

Email: **subscriptions@warnersgroup.co.uk**

Or call: **01778 392033** quoting offer code: **LRM/APR20**

Gift limited to 150 subscribers. Please allow 28 days for delivery. UK only. Warners Group Publications PLC reserves the right to limit offers of this kind to one per household. If we deem this offer to be misused by either any discount sites or any individual, we reserve the right to withdraw the offer and not fulfil any issues or the gift. No money will be deducted.

LAND ROVER MONTHLY

SUBSCRIPTION OFFER

THE WORLD'S FASTEST GROWING LAND ROVER MAGAZINE



YOUR **GREAT** DEAL

- Your first **5 issues for just £5,** then a further **20% saving on the shop price**
- **FREE Land Rover Series I Fire Brigade Model (1:43 scale).** Gift limited to first 150 subscribers
- **FREE delivery to your door**
- Receive each issue before it's available in the shops

YOUR **FREE** GIFT

FREE Land Rover Series I Fire Brigade Model (1:43 scale)



Gift limited to first 150 subscribers.

SUBSCRIBE TODAY:

Enjoy 5 issues for £5, then a follow on price of £23.99 by half-yearly Direct Debit, save 20% on the shop price



Quote offer code: LRM/APR20

A modified CAR FOR ALL REASONS

Ambulance, fire engine, limousine and hunting vehicle... The Range Rover must take the title of most converted car of all time. Nick Dimbleby delves into his archive

OVER the past 50 years, the Range Rover has been chopped up, stretched, decapitated, fitted with extra wheels and modified more than any other car. It has been painted fire engine red as well as garish pink, there have been winches fitted, extra doors, elevating seats and pseudo Rolls-Royce grilles. It's been stretched to the limit (and beyond), and if you can dream it, then chances are it's already been done to a Range Rover somewhere, some time.

The reasons for this are many. In the 1970s there was only one, relatively basic, version of Range Rover available from Land Rover, and as the vehicle became the choice of the world's wealthly, they were keen to change and adapt it to suit their needs. As well as this, up until 1983, there was no coil-sprung or high-powered Land Rover product available, which meant that if you wanted a comfortable ride for your ambulance or a fast top speed for your airfield fire engine, then there was no choice but to buy a Range Rover and convert it.

The golden era of Range Rover conversions was between the mid-1970s and early 1980s, but there are still a few specialists working their magic on the current model. Admittedly there are less fully modified Range Rovers being produced nowadays, but that is perhaps because the offerings from Land Rover's own Special Vehicle Operations are more luxurious than they were back in the conversions heyday.

I've been in to Range Rover conversions since an early age. In fact, it was the publication of my book Range Rover Conversions in 1987 (at the tender age of 13) that started me off professionally in the world of Land Rover. I'm always on the look out for new and interesting Range Rover conversion photos and brochures, but as most of the original documents and photos are well over 35 years old now, inevitably things have become lost, destroyed or forgotten about. If you have any you would like to share or get rid of, please let me know!

Over the next few pages, please allow me to share a small part of my archive with you, offering a glimpse at the amazing world of Range Rover conversions since 1970. One day I will try and see what vehicles I can track down in the Middle East; there were hundreds if not thousands that made their way over there back in the '70s, '80s and '90s. Where are they now?





A late model Carmichael Commando, featuring four doors and the original sloped roof design. A roof mounted foam monitor and foam pump provide the fire-fighting capability

STORY AND PICTURES BY NICK DIMBLEBY

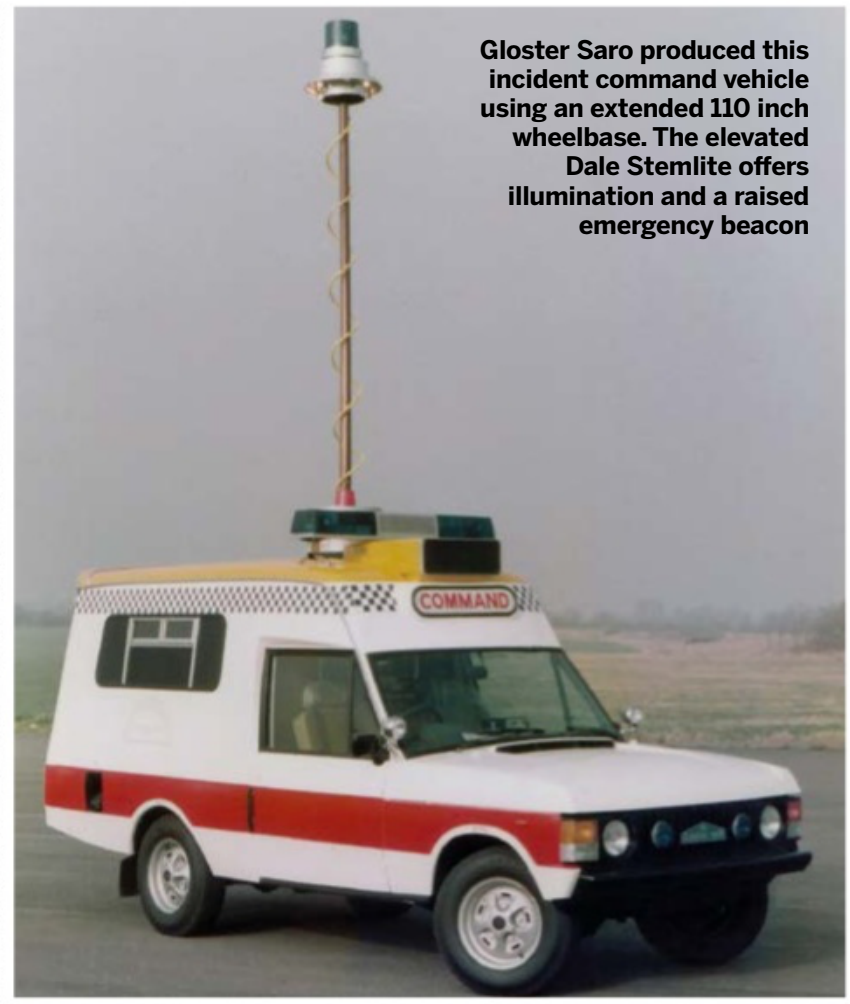


The Range Rover was adopted by many police forces around the world. Here, the Swiss police use theirs for traffic control while investigating an accident. Note the Warn 8274 winch installation behind the front grille

Police, Fire, Ambulance

SINCE the start of sales in 1970, Land Rover actively marketed the Range Rover to emergency services worldwide. At the time, the Series III was no match for the Range Rover's comfort and agility off-road, and there were precious few vehicles that could cruise at 100 mph on the motorway one minute and then climb a 45 degree slope the next. It's no coincidence that demonstration drives to fleet buyers at Solihull in the 1980s culminated with a lap of the old test track, followed by a deft selection of low range and a blast up a hill that was a similar height and gradient to a motorway embankment.

As well as the standard police fleetline specification, there were special versions produced by Land Rover's Special Projects department, the police forces' own garages and other specialist converters. London's Metropolitan Police had a number of half-armoured Range Rover Classics, as well as special escort vehicles and some van versions. Many Middle Eastern police forces had special versions, including some extended 110 inch four-door versions produced by FLM (Panelcraft) for Bahrain in the early 1970s.



Gloster Saro produced this incident command vehicle using an extended 110 inch wheelbase. The elevated Dale Stemlite offers illumination and a raised emergency beacon



Also on the 110 inch wheelbase is this four-door conversion ordered by the Abu Dhabi Police in the mid-1970s. The vehicle was built by FLM (Panelcraft)

As far as ambulances were concerned, Land Rover produced their own version initially in conjunction with Spencer Abbott (see LRM, March 2020), then offering approval for versions produced by established ambulance builders Pilcher Greene, Wadham Stringer and Herbert Lomas. Each of these versions were slightly different from one another in design, but they all offered a raised roof body and an extended wheelbase of either 110 or 135 inches. To provide extra space in the patient area, all versions had extended rear overhangs. At a conservative estimate, several hundred Range Rover ambulances were built between 1971 and 1984, after which the (cheaper) coil sprung Land Rover 110 was chosen as base vehicle.

Last but by no means least is the Range Rover fire appliance. Once again, the first prototype was manufactured by the Special Projects Department at Solihull (in 1971), but as this was only based on the standard 100 inch wheelbase, it was considered to be too small for most firefighting operations. One of the pre-production Velars (YVB 152H, chassis no. 2) was sent off to Carmichael Fire in Worcester to be converted into the first six-wheel, four-wheel drive chassis (6x4). The trailing rear axle being added to increase payload and to allow space for a 200 gallon premix foam tank.

The intended use for the 6x4 Range Rover fire appliance was as a fast response airfield crash rescue vehicle, and once official Land Rover Approval had been granted, airports around the world were quick to order from Carmichael themselves, and, later, from rival manufacturer, Gloster Saro. Gloster Saro secured the UK MoD contract to produce the TACR2 (Truck, Air Crash Rescue 2) to an MoD design, which included a four-door conversion and seating for four personnel.

Once the four-door Range Rover became a production model, both Carmichael and Gloster Saro continued to produce the 6x4 RIV in considerable numbers, with the last vehicles being produced in 1991 for a final MoD TACR2 contract. These vehicles remained in service until the late 1990s.



The six-door Range Rover is an impressive looking conversion. This version was sold by Elektiar of Saudi Arabia

Six door, 12 seater

IN the 1970s, if you needed a minibus with off-road capability, then the choice was between the Land Rover Series III 109 Station Wagon and the extended wheelbase six-door Range Rover. The first six door version was produced by FLM (Panelcraft) of London around 1976, and this used their four-door conversion as a base, as the Range Rover was only available as a two-door ex-works.

Once the factory four-door became available in 1981, the six-door conversion was a lot easier to carry out, and consequently they became more popular. Different levels of interior appointments were offered, from standard seating to full leather and walnut retrim, and all the main conversion companies offered six-door models as part of their range.

Although sold as a 12 seater, seats nine to 12 were fitted in the rear loadspace, and realistically these were only for small adults or children.



Once the RR Classic had been discontinued, six-door conversions were produced using the P38A Range Rover too. This version with cloth seats was produced by Jankel

Wood & Pickett Multi-Role vehicle

CONVERSION specialists Wood & Pickett offered the stylish Aintree Multi-Role vehicle from 1976. Designed as a pick-up, the vehicle was offered with configurable rear seating and various other options depending on end use. A fold-flat windscreen was standard, even though there was a bespoke enclosed cab manufactured from metal.

The prototype Aintree Multi-Role was built by London coachbuilders Vanden Plas, using their bespoke metalwork skills to hand craft the upper body. The wheel arch extensions and front bumper were made from GRP. Although marketed extensively, the Aintree Multi-Role didn't sell in large numbers.



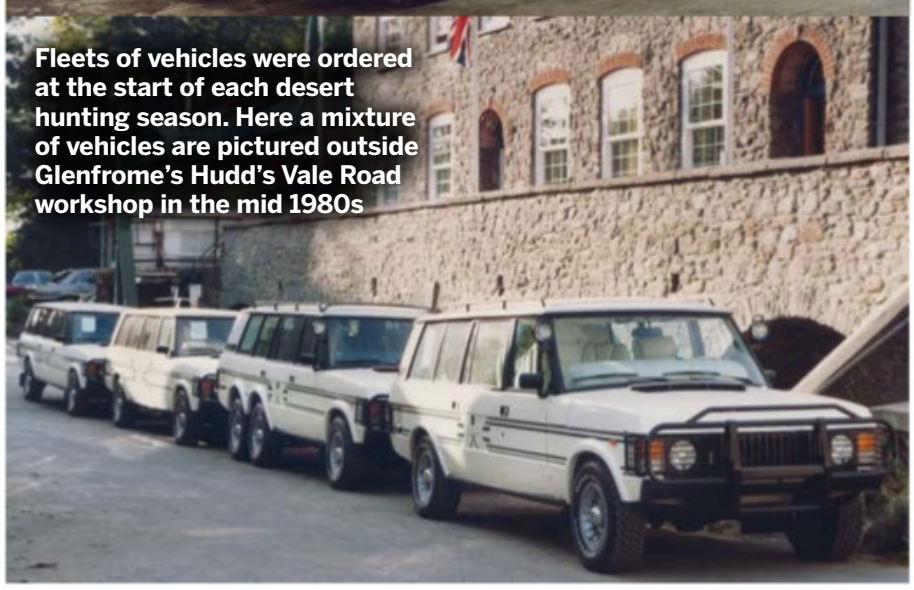
The Aintree Multi-Role Range Rover by Wood & Pickett was designed to be configurable by the end user, although the basic cab design and rear body was universal



Staff and directors from Glenfrome demonstrate the elevating hunting seats on this 135 inch wheelbase conversion



Extended 135 inch wheelbase, two-door open top with bespoke elevating seats. This vehicle was coachbuilt by AE Smith of Kettering in the mid-1970s



Fleets of vehicles were ordered at the start of each desert hunting season. Here a mixture of vehicles are pictured outside Glenfrome's Hudd's Vale Road workshop in the mid 1980s

Hunting vehicles

THE sport of desert hunting with hawks and falcons is extremely popular in the Middle East, and the Range Rover established itself quickly as the vehicle to have among the ruling families of the Middle East. During the 1970s and 1980s, hundreds of hunting Range Rovers were produced for the royal families of the region, with fleets of vehicles being built for the start of each season.

These vehicles ranged from fully open models with six wheels or extended wheelbases, through to enclosed versions with full-length Webasto folding sunroofs. Most hunting vehicles featured elevating hunting seats, using hydraulics to raise the front and rear passenger seats above the level of the roofline for a better view, and the engineering ingenuity to produce these is fascinating.

The hunting Range Rovers were built to cope with extended trips out into the desert, with long-range fuel tanks, water tanks, sand tyres and winches often being fitted. Another popular option was falcon perches for the birds to rest on when not hunting.

Personnel carriers

PERSONNEL carriers were frequently ordered alongside the hunting Range Rovers, to transport staff on desert trips. These vehicles are normally fully open, complete with fold-flat windscreens for maximum visibility whilst driving in the dunes.

As well as for desert hunting trips, Range Rover personnel carriers were ordered for use by troops of the Royal Guard of several Middle East royal families. These were used primarily for ceremonial purposes, although they were still equipped with machine gun posts, folding side bodywork and even smoke grenade launchers in the case of one 135 inch wheelbase vehicle.



Both four-door and two-door fully open vehicles were made with fold-flat windscreens. They must have been fun to drive across the desert



This impressive 135 inch ceremonial escort vehicle features gun mount and smoke grenade launchers



Two-tone paintwork, chrome wheels and a new front end make this extended wheelbase Range Rover even more distinctive



Glenfrome produced a saloon version of their 118 inch wheelbase limousine that was called the Dyrham



This fully retrimmed interior is on a 110 inch wheelbase Range Rover, and it predates Land Rover's own LSE model by ten years



Doesn't this TV and video installation look dated?



The Westbury was Glenfrome's 135 inch wheelbase Range Rover, and here the rear door has been extended further to aid access for the VIP in the back



SMC's Range Rover convertible had an enclosed cab

Six-wheelers

AS mentioned previously, the first six-wheel Range Rovers were built to carry the extra weight needed by the foam tanks for firefighting, but it wasn't long until Carmichael and other companies started to build passenger versions. Most were four-wheel drive with a trailing rear axle (6x4), but after Scottorn Trailers pioneered their 6x6 all-wheel drive version, other coachbuilding companies were quick to follow suit.

Different bodies were available, from extended standard versions through to raised roof bodies with bespoke seating configurations. As ever, different engine options were offered, with many of the larger vehicles featuring the 5.7-litre Chevrolet V8 for extra power and torque.

Convertibles

THE timeless lines of the Range Rover Classic work well as a convertible, and – as ever – there were a lot of variations on the theme produced by the various Range Rover coachbuilders. Glenfrome produced the 'Ashton', which was either built on a standard 100 inch wheelbase with an eight inch rear overhang extension, or a 110 inch wheelbase with a standard overhang.

Other companies, such as Wood & Pickett, produced their convertibles on the standard wheelbase, but with a fully opening roof that was power operated. Some four-door versions were also produced, but these tended to have an upper roll cage to allow for additional strength.

Extended wheelbase limousines

SPENCER Abbott were responsible for the first extended Range Rovers, with two wheelbase lengths available: 110 and 135 inch. They received official approval from the Land Rover Special Projects department, and the company produced most of the chassis extensions in the early days.

AE Smith and Son (Coachbuilders) of Kettering also produced a lot of extended wheelbase conversions from the mid-1970s onwards, and as they were also a subcontractor for Wood & Pickett and Rapport International, they were kept busy. Like the six-door conversions, the level of interiors varied enormously. Some were relatively standard, whilst others featured additional fold away seats, full retrims in Connolly leather or Dralon, and even TVs, video players and cocktail cabinets. The latter look quite dated nowadays with their Hi-8 tape players and 10 inch 4:3 screens!

Externally, there were also a lot of variations. Up until 1981, all the extended wheelbase Range Rovers were based on the two-door model, with rear doors being shortened versions of the standard front door. Some vehicles (such as the Rapport Excelsior) had shorter front doors (the important people being in the back, of course), whilst once the four-door Range Rover was available, the variations continued but with modified doors fitted with the Range Rover/Morris Marina door handles. Wheelbase lengths were normally 110, 118, 124 and 135 inches.


Scottorn Trailers of Buckinghamshire were the first to produce the 6x6 all-wheel drive six wheeler.


This fully open convertible by Symbol is based on the standard Range Rover wheelbase


Contrast the above with the 110 inch wheelbase Glenfrome Ashton, complete with striped mink interior



The owner of this vehicle was keen to take enough spare wheels for all eventualities



Before Land Rover made their own four-door, conversion specialists like Pilcher Greene made these

Four door conversion/standard wheelbase

FOR the first 11 years of Range Rover production there was no four-door option. This is inconceivable nowadays, but at the time, demand for the Range Rover was outstripping supply, and as parent company British Leyland had little cash to invest, the development of the Range Rover was minimal throughout the 1970s.

The Duke of Roxburgh was the first individual to request a four-door Range Rover, and after commissioning FLM (Panelcraft) to build him one, the company were the first coachbuilders to offer a factory approved version from 1974 onwards. Frustratingly, Land Rover engineering had produced a four-door Range Rover as early as 1972, but after assessment and then rejection by management, the vehicle was converted back to two-door and sold.

Many four-door Range Rovers on the standard wheelbase were made by FLM (Panelcraft) and other companies, including Pilcher Greene and Panther Westwinds, were renowned for their four-door conversions. These were mostly for export, but a few remained in the UK.

Other standard wheelbase conversions were produced, mainly with retrimmed interiors, different front-end treatments, and in the case of one vehicle produced for a Middle Eastern client, with a cut-out pick-up rear, complete with additional spare wheels attached to a unique external roll cage.



Rebodied Range Rovers

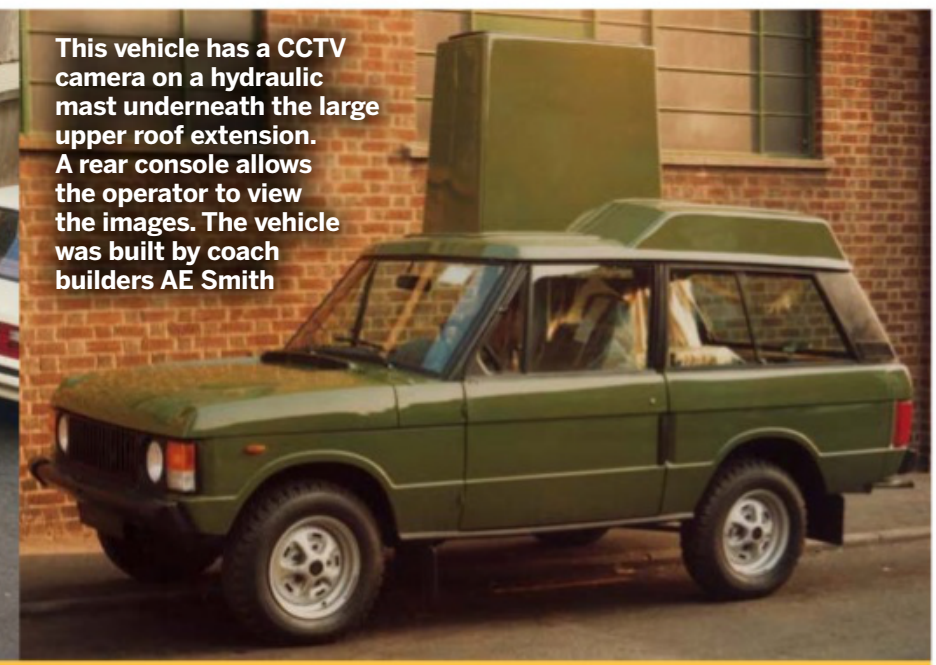
ONE of the most extreme Range Rover conversions was the remarkable Glenfrome Facet, a completely rebodied Range Rover designed by Dennis Adams. Angular in shape, the vehicle was very distinctive and quite attractive – particularly in its original colour of metallic green. The Facet conversion tripled the cost of the original Range Rover, as its body was removed and discarded, with just the chassis, powertrain and bulkhead/transmission tunnel retained. All bodywork was made from scratch, while the interiors were completely to order. The removable roof panel could be stored in a compartment under the power-operated bonnet. The Facet is a very rare and unusual conversion.



This quad headlamp conversion with chrome centre grille was quite a popular choice



The BBC operated Range Rovers as reception survey units throughout the 1970s and '80s. The elevating mast was manufactured by Clark Masts in the Isle of Wight



This vehicle has a CCTV camera on a hydraulic mast underneath the large upper roof extension. A rear console allows the operator to view the images. The vehicle was built by coach builders AE Smith

Working conversions

UP until the launch of the Land Rover One Ten in 1983, if you wanted coil springs and a V8 engine, there was only one model to choose from in the Land Rover stable. As such, the Range Rover was the first choice for many state and military users when off-road capability and comfort had to be combined. Until the Discovery came along in 1989, if you wanted a vehicle that could cope with high-mileage on-road driving as well as off-road supremacy, then there was no choice but to opt for the extra expense of a Range Rover.

The vehicles featured here include military communication units, as well as CCTV surveillance vehicles. The BBC also used Range Rovers for their Reception Survey teams, checking on the strength of transmission signals all over the UK. Fitted with extendable Clark Masts, these were impressive looking vehicles when the masts were raised. Where are these vehicles now?

P.A BLANCHARD & CO.

EX MILITARY LANDROVER SPECIALISTS, CLAY LANE, SHIPTONTHORPE, YORK, UK YO43 3PU

EX MOD SPARES, SURPLUS STORES & EQUIPMENT

TEL: +44 (0)1430 872765

Fax: +44 (0)1430 872777 **Email:** info@pablanchard.co.uk **Website:** www.pablanchard.co.uk



WANTED

NEW LAND ROVER PARTS PURCHASED IN ANY QUANTITY



Military Surplus Defender Snorkel Kits
Part #: STC50265 Fits 300 TDi, TD5 and Puma, both military and civilian vehicles. Military High spec finish.
Price £58.29 + VAT



Just Released, Military Snow Cover for Heater Air Intake,
Fits all Defenders,
RHD LHD available,
(Photo shows RHD)
Price £49.95 + VAT



Just Released, Military Radiator Muff Assembly.
Fits all Defenders.
Complete with Turnbuckle Fixings and Rivets.
Price £49.95 + VAT.

ebay

OUT OF AFRICA

Battered jungle workhorse from Uganda is transformed into a stunning Defender after getting the RIVOLVE treatment

STORY: DAVE PHILLIPS PICTURES: NENE OVERLAND

OUT in the jungles of Uganda the superstitious locals are so afraid of witchdoctors and their evil spells that they sacrifice children in order to appease them. It is said that they can contact the spirits of the dead to perform miracles, but the Ugandan owner of the Defender featured on these pages knew it would take more a witchdoctor to put right the years of abuse it had suffered in the jungle.

Instead he turned to a power even greater than traditional black magic: the internet. And there he found Nene Overland, a company well known for bringing aged Defenders back from the dead. The only sacrifice involved would be a financial one. And so the deal was done.

"The owner contacted me out of the blue," explains Nene Overland's owner, Andrew Harrison-Smith. "He's a wealthy businessman who works on civil engineering contracts for the Ugandan government. His Defender was a Td5 Station Wagon that had spent its entire life off-road, working in the jungle, but he got out of bed one morning and decided to give

his neglected workhorse a new lease of life.

"He found me on the internet. It was a brave thing for him to do, especially as he didn't know me and getting us to do the work would mean shipping it to England. But he liked what we did and it was all arranged over the telephone and via WhatsApp."

What the Ugandan client had liked most was the way Nene Overland turned standard Defenders into lairy road machines with either tuned TDCi Puma engines or, more bonkers still, fire-breathing petrols, in the way of huge Chevy V8 engines. He opted for the latter — all 6.3-litres and 430 bhp of it.

The vehicle that was to be the basis of this transformation was shipped over and arrived at Nene Overland's premises near Peterborough, Cambridgeshire, last year. It looked a sorry state.

"It was originally white, but you'd hardly have known that because it was covered in mud from its time in the jungle," says Andrew. "But once we washed the mud off, it



Shade of grey from BMW's palette looks smart





Living in Uganda the chassis was perfect, but Nene Waxoyled for good measure...



... The brakes and suspension however did not fare so well and so were replaced

wasn't as bad as I'd feared. There were a couple of dents, but the bodywork wasn't too bad considering the sort of life it had led.

"The brakes and suspension were shot, and the steering arms were bent. The interior was a mess, but none of this mattered because it was all going to be replaced anyway. The good news was the chassis was perfect — that's the good thing about hot countries — no salt on the roads to cause serious corrosion issues — but we Waxoyled it anyway, to keep it pristine. "

It would have been the easiest thing in the world for the Nene Overland team to turn the rich Ugandan's truck into yet another tarmac-biased speed machine, but Andrew — himself an experienced off-roader — was determined to create a vehicle more suited to its owner's needs.

"Most of the refurbishment jobs we do here on Defenders involve making them more suitable for road driving rather than off-road, but that wouldn't be suitable for the sort of terrain he'd be driving in Uganda. I listened to what he would be using it for before I recommended the upgrades I thought appropriate. He told me most of the roads were sandy and potholed, so I based my recommendations on that.

"For example, he wanted big brakes — you know, the vented discs and so on that we would normally fit. But their only real advantage is if the owner is going to drive it like a racing car, which in this case the owner wasn't. It was going to spend most of its life off-road, so standard Defender brakes were best because they are perfectly up to the job and — very important this — it's easier to get spare parts in the jungle. I explained that to him and he agreed."

The bent steering arms were replaced with heavy-duty ones, protected by a steering guard that the Nene Overland team also fitted. The shot suspension was replaced with a plus 1.5 inches Old Man Emu set-up, with medium-duty, nitro-charged shock absorbers. The vehicle was also treated to Polybush bushes all round.

The tasty alloy wheels that Andrew would usually fit were shunned in favour of more durable steel wheels that can be easily hammered back into shape if they make an unfortune contact with a rock. But these were no ordinary steel wheels: they were NJ Lee comp safari specials from Matt Lee, shod



No longer a modest Td5 but a big Chevy V8

with all-terrain General Grabber rubber. In the event of a puncture, the spare wheel is easily accessed from the swingaway carrier at the rear.

One of life's minor mysteries is how Nene Overland manages to squeeze a big Chevy V8 into the space vacated by a modest Td5 engine. But they're past masters of the transplant now and it looks as though it was meant to be there. The 430 horses let loose by this engine are sent galloping through a six-speed automatic gearbox, with Tiptronic manual override, then on through the original (reconditioned) Defender transfer box to heavy-duty, limited-slip differentials — three of them, to be exact. One for the front axle, one for the rear and another for the transfer box. "You can't use fixed diffs with all that power," says Andrew. "We fitted heavy-duty half-shafts and CV joints, for the same reason."

Also heavy-duty were the new engine mounts — essential to take the strain of that LS3 Chevrolet lump.

Fitting a non-standard engine and auto gearbox to a modern Land Rover with its complicated electronics is the biggest obstacle to this type of conversion, but after years of experimentation, Nene Overland's technicians have come up with a tried-and-tested solution that prevents a veritable rats' nest of extra wiring. It's a secondary ECU that neatly fits inside a waterproof black box mounted alongside the battery. "We have spent a lot of time making sure everything works correctly," says Andrew.

A custom exhaust system was also essential. Each one is built on site by Nene Overland's fabricators, in stainless steel and specified to meet all emissions regulations. The system on this truck has the perfect rasping note that tells you there's something a bit special under the bonnet, but without waking all the neighbours. It's as much a statement of taste as power.

Lighting is all LEDs and include bonnet lights and a full-width strip of Lazer LEDs across the top of the windscreen. They should certainly be capable of picking out the stray gorilla, if not David Attenborough, during night drives through Uganda's celebrated rainforests.

There is also privacy panoramic glass fitted to the sides of the station wagon, which was originally 'Rest of World' spec



New LED lighting does the job and looks the part, in UK or Uganda



After a row with JLR Nene's Defenders are now branded RIVOLVE rather than Icon





Black half leather buckets with matching tip-up seats in the rear

CONTACT
rivolve.com or call Nene Overland on 01733 380687

and factory-fitted air conditioning. Very handy in the oppressive humidity of its jungle home.

The full body refurb specified by the customer included a respray in grey, with a black roof. You've got to admit it looks the part, but eagle-eyed readers may be puzzled by the shade of grey. If so, puzzle no longer: the shade is 'Granite', from the BMW palette. Looks good, doesn't it?

Nene Overland have their own bodyshop and spray booth on site. "When we do a respray we do it properly," says Andrew. "You can't cut any corners to get the sort of finish we take pride in. All cappings and fiitings are removed so the bodywork is painted behind them. It takes a bit more time, but it's essential if you want quality."

There's an emphasis on quality in everything they do, which continues inside the vehicle. The interior is black and includes half-leather 'Comfort' seats, with matching tip-up seats in the rear. The tasty steering wheel is from Momo — a feature that's a fixture these days on this sort of luxury rebuild.

But don't let the stunning good looks and plush interior fool you. This is no tart's palace: if it came to a punch-up between form and function, function would win every time. This was built for a purpose, so of course it's purposeful. The on-road ride isn't as hard as the all-out road-going version would be, but it's firm and very tight on the corners. Cambridgeshire on a soggy February day is no place to test its ability in Uganda's steamy jungle tracks, but I'm confident it will deliver. I'm equally sure it's proud owner will be very pleased when he comes to pick it up.

I've known Andrew for more than 20 years and I've seen Nene Overland evolve through those years into a specialist in upmarket, customised Defenders. In an earlier incarnation, these vehicles were branded 'Icon' but a row with Jaguar Land Rover over naming rights led to the current name on the front of bonnet: RIVOLVE.

"The name 'Rivolve' suggests turning it around, refurbishing, restoring and, yes, aggression," says Andrew. "Our website, rivolve.com, is focused on high-end rebuilds. There is a market out there for people prepared to pay good money for the right vehicle. And whether they come from Uganda or Uttoxeter, we are the people to do the job."

NENE OVERLAND



ACTION - ADVENTURE - ADRENALINE - SINCE 1988



RETRO CLASSIC - DEFENDER SOFT TOPS

We continue to create some of the nicest soft top LR90/110/130 Retro, or bespoke for you. Diesel, petrol V8 LHD/RHD.



DEFENDER SALES - 90 - 110 - 130

50 Defenders carried in stock, specialist in 90/110 station wagon 130 - any bespoke requirement, worldwide shipping, US supply.



EXPEDITION - BESPOKE BUILDS - ALU CAB

Renowned for turning out unique Defenders built for any occasion; Defender Pop Top campers, interior - exterior builds, Nene CamelBaC trailers.



V8 INSTALLS - COMPLETE BUILD - SALES

Industry leading Corvette LS3 6.2 V8 installs. Complete turn key Defenders supplied to client spec or drive in drive out conversions.

WORLDWIDE EXPORT

CamelBAC TRAILERS

RIVOLVE

BODY SHOP 47 BODY REPAIR CENTRE

NENE OVERLAND

LR SOUNDS DEFENDER AUDIO, COMMS, ENTERTAINMENT & SOUNDPROOFING

OPEN 4U: 8.30 to 5.30 weekdays - 8.30 to 1pm Saturday

Manor Farm, Ailsworth, Peterborough, PE5 7DL

Tel - 01733 380687 / Sales hotline 07850 156655 - after hours by appointment

www.neneoverland.co.uk advice@neneoverland.co.uk

Machine Mart®

65 SUPERSTORES NATIONWIDE

WHERE QUALITY COSTS LESS



Clarke® HD PLUS | BALL BEARING ROLLER DRAWERS

MODULAR GARAGE STORAGE SYSTEMS

PRICE CUT NOW FROM
£799.00 EXC.VAT
£958.80 INC.VAT
WAS £982.80 inc.VAT

- ✔ CREATE THE PERFECT FITTED GARAGE / WORKSHOP
- ✔ HEAVY DUTY, PROFESSIONAL PACKAGES - CHOICE OF 10
- ✔ ALL UNITS ALSO AVAILABLE SINGLY FOR CUSTOM BUILD

PACKAGE A
£1999.00 EXC.VAT
£2398.80 INC.VAT

ALL THIS FROM ONLY £86.04 INC VAT PER MONTH*

FREE UK DELIVERY

Gas struts to hold top cabinet doors open



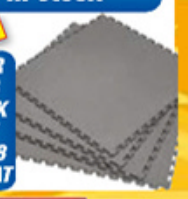
High quality, stylish, black and grey powder coated finish

A choice of stainless steel or wooden worktops

Lockable floor cabinets

Corner units in stock

ALSO FLOOR TILES 4 PACK ONLY £35.98 INC. VAT



① £129.98 EXC.VAT
£155.98 INC.VAT



RUBBER GRIP SIDE HANDLES

EXTRA LARGE DRAWER PULLS

② £249.98 EXC.VAT
£299.98 INC.VAT

Clarke® HD PLUS
BALL BEARING ROLLER DRAWERS

FULL DETAILS - SEE IN-STORE OR VISIT WEBSITE

HEAVY DUTY & PROFESSIONAL

THE ULTIMATE IN TOOL STORAGE!

- Extra heavy gauge double wall steel construction

EXTRA LARGE SIDE HANDLE FOR EASY MOVEMENTFITS EITHER SIDE



BLUE LINE INDUSTRIAL | Clarke CONTRACTOR | BLACK GOLD LINE



GREAT LOOKING, BIG 5" INDUSTRIAL CHROME SPOKED WHEELS FOR EASY MOVEMENT

"Fantastic chest and top box combi, well built, well packed ideal for home and workshop use. Will be getting another set asap"
See www.machinemart.co.uk

MODEL	DESCRIPTION	DIMS LxWxH (mm)	EXC. VAT	INC. VAT
① CBB209B	9 Dr Chest	710x315x420	£129.98	£155.98
CBB210B	10 Dr Chest	710x315x475	£139.98	£167.98
CBB203B	3 Dr step up	710x315x250	£72.99	£87.59
CBB215B	5 Dr Cabinet	758x468x815	£199.98	£239.98
② CBB217B	7 Dr Cabinet	758x468x975	£249.98	£299.98
CBB213B	3 Dr Cabinet	758x481x975	£199.98	£239.98

Clarke® HD PLUS
BALL BEARING ROLLER DRAWERS

MECHANICS/ PROFESSIONAL TOOL CHESTS/ CABINETS

FULL EXTENSION ROLLER RUNNERS FOR SMOOTH OPENING ACTION

CTC1300B
£159.98 EXC. VAT
£191.98 INC.VAT

13 DRAWER COMBO

LARGE CAPACITY LOWER STORAGE COMPARTMENTS



EXTRA LARGE EXTRA HEAVY DUTY

BALL BEARING ROLLER DRAWERS

① £269.98 EXC.VAT
£323.98 INC.VAT

GAS STRUTS Hold lid open

EXTRA LARGE 41" CABINET



GREAT LOOKING, BIG 5" INDUSTRIAL CHROME SPOKED WHEELS FOR EASY MOVEMENT*



EXTRA LARGE SIDE HANDLE FOR EASY MOVEMENT FITS EITHER SIDE

② £469.00 EXC.VAT
£562.80 INC.VAT

MODEL	SIZE	DESCRIPTION	DIMS LxWxH (mm)	EXC. VAT	INC. VAT
① CBB224B	41"	14 Dr chest	1045x415x486	£269.98	£323.98
② CBB226B*	41"	16 Dr cabinet	1126x468x1000	£439.00	£526.80

*Was £562.80 inc.VAT

Clarke® HD PLUS
BALL BEARING ROLLER DRAWERS

① £144.99 EXC.VAT
£173.99 INC.VAT

TOOL CHESTS/ CABINETS

- Heavy duty/industrial build quality with lockable front covers for added security and protection

LOCKABLE FRONT COVERS STORE NEATLY WITHIN CABINET



② £289.98 EXC.VAT
£347.98 INC.VAT

MODEL	DESCRIPTION	DIMS LxWxH (mm)	EXC. VAT	INC. VAT
① CBB209DF	9 Dr chest	710x370x420	£144.99	£173.99
② CBB211DF	11 Dr Cabinet	785x490x1075	£289.98	£347.98
CBB309DF	9 Dr chest	975x370x420	£169.98	£203.98
CBB311DF*	11 Dr Cabinet	1045x490x1075	£339.98	£407.98

*Was £419.98 inc.VAT

Clarke® PREMIUM

CHESTS/ CABINETS

BALL BEARING ROLLER DRAWERS

30KG MAX DRAWER LOAD

① £119.98 EXC.VAT
£143.98 INC.VAT

Combines premium quality with fiercely competitive pricing & super smooth ball bearing roller drawers

② £199.98 EXC.VAT
£239.98 INC.VAT

SEE WEBSITE FOR PACKAGE DEALS WITH TOOLS

EXTRA LARGE BOTTOM DRAWERS

MODEL	DESCRIPTION	DIMS LxWxH (mm)	EXC. VAT	INC. VAT
① CLB900	9 Dr chest	660x305x475	£119.98	£143.98
② CLB1007	7 Dr cabinet	685x465x955	£199.98	£239.98

Clarke® BOLTLESS SHELVING BENCHES



- Simple fast assembly in minutes using only a hammer

SAVE EXTRA 10%
WHEN YOU BUY 4 SHELVING UNITS AND SAVE AT LEAST £23.99 INC.VAT

150KG PER SHELF — Strong 9mm fibreboard shelves

350KG PER SHELF — Strong 12 mm fibreboard shelves

CHOICE OF 5 COLOURS
RED, BLUE, GREY, SILVER & GALVANISED STEEL

FROM ONLY £29.98 EX.VAT
£35.98 INC.VAT

MODEL	DIMS WxDxH(mm)	EXC.VAT	INC.VAT
150kg	800x300x1500	£29.98	£35.98
350kg	900x400x1800	£49.98	£59.98



Clarke®

HEAVY DUTY BOLTLESS SHELVING

Boltless, quick and easy assembly (only a mallet required) • Tough steel frame • Adjustable height shelves • 5 easy wipe clean laminate board shelves • (W)1220 x (D)460 x (H)1830

265KG PER SHELF

ONLY £79.98 EX.VAT
£95.98 INC.VAT

BLUE, RED AND SILVER AVAILABLE

Clarke®

WORKBENCH WITH PEGBOARD

Easy to assemble, providing valuable working space and plenty of additional storage capacity.

Available in Red or Galvanised Finish

- Dimensions (LxWxH) - 1150 x 560 x 1440 mm
- Pegboard back wall with 30 hooks supplied



£64.99 EX.VAT
£77.99 INC.VAT

CWB-R1B

29721

ALL SIZES/SPECIFICATIONS ARE APPROXIMATE

SEE NEXT PAGE FOR MORE!

Clarke 18V ½" BRUSHLESS IMPACT WRENCHES



- 3 forward and reverse gears
- 450NM
- powered by Li-ion

FROM ONLY £114.99 EX.VAT £137.99 INC.VAT

CIR18LIC

MODEL	DESC.	EXC.VAT	INC.VAT
CIR18LIC	2x 2.0Ah Li-Ion	£114.99	£137.99
CIR18LI	2x 4.0Ah Li-Ion	£169.98	£203.98

EASY TO USE WEBSITE

NOW OVER 21,000 PRODUCTS ONLINE!



For hard-to-find, specialist items visit the Xtra section on machinemart.co.uk

NEW 508 PAGE CATALOGUE

Over 500 PRICE CUTS & NEW PRODUCTS



GET YOUR FREE COPY NOW!

- IN-STORE
- ONLINE
- PHONE

0844 880 1265

Clarke INVERTER GENERATORS



- Produces sine wave & stable power, essential for computers & sensitive equipment
- Low noise • Fuel Efficient Eco Throttle • 12V battery charging facility • Up to 7 hours run time on 3/4 load • 4 stroke engine

FROM ONLY £179.98 EX.VAT £215.98 INC.VAT

IG1200B

MODEL	MAX OUTPUT	WEIGHT KG	EXC. VAT	INC. VAT
IG950B	800W	9.3	£179.98	£215.98
IG1700F	1700W	22	£199.00	£238.80
IG1200B	1100W	12.4	£249.98	£299.98
IG3500F	3400W	35	£329.00	£394.80
IG2000B	1800W	19.4	£329.00	£394.80
IG2200	2200W	26.6	£379.00	£454.80

Clarke GENERATORS PG3800

Honda engine models available

FROM ONLY £99.98 EX.VAT £119.98 INC.VAT

CHECK FRAME TYPE WHEN ORDERING

MODEL	KVA	HP	EXC.VAT	INC.VAT
G720	0.7	-	£99.98	£119.98
G1200	1.1	-	£159.98	£191.98
PG2500	2.2	6.5	£179.98	£215.98
PG3800	3	7	£239.98	£287.98
PG3800DV	3	7	£269.00	£322.80
PG6500DVES	5.5	13	£499.00	£598.80

Clarke MIG WELDERS

Quality machines from Britain's leading supplier

See online for included accessories

GAS, TIPS, SHROUDS, WIRE & HEAD-SHIELDS IN STOCK

FROM ONLY £194.99 EX.VAT £233.99 INC.VAT

135TE

MODEL	MIN-MAX AMPS	EXC.VAT	INC.VAT
PR090	24-90	£194.99	£233.99
110E	30-100	£229.98	£275.98
135TE Turbo	30-130	£249.98	£299.98
151TE Turbo	30-150	£289.00	£346.80
175TECM Turbo	30-170	£449.00	£538.80
205TE Turbo	30-185	£489.00	£586.80

Clarke JETSTAR PRESSURE WASHERS



Makes easy work for washing vehicles, patios, stonework, etc. • JET7500, 8500 & 9500 include hose reel

FROM ONLY £59.98 EX.VAT £71.98 INC.VAT

210 Bar 3045 psi

JET9500

* was £149.99 inc.VAT

MODEL	MOTOR	MAX. PRESSURE	EXC.VAT	INC.VAT
JS1850	1400W	1523psi	£59.98	£71.98
JS1950	1600W	2030psi	£89.98	£107.98
Jet 7500*	1600W	2030psi	£119.98	£143.98
Jet8500	2100W	2610psi	£149.98	£179.98
Jet9500	2400W	3045psi	£179.98	£215.98

Clarke HEAVY DUTY PETROL POWER WASHERS

NEW



PLS195A

CAN DRAW OWN WATER

Honda & Diesel engine models in stock

FROM ONLY £229.00 EX.VAT £274.80 INC.VAT

MODEL	PRESSURE BAR/PSI	ENGINE HP	EXC. VAT	INC. VAT
Tiger1800	110/1595	2.6	£229.00	£274.80
Tiger2600	170/2465	4	£289.00	£346.80
Tiger3000	200/2900	6.5	£349.00	£418.80
PLS195A NEW	182/2640	5.5	£439.00	£526.80
PLS265A NEW	225/3263	13	£669.00	£802.80

Clarke INTELLIGENT BATTERY CHARGER/ MAINTAINERS



FROM ONLY £49.98 EX.VAT £59.98 INC.VAT

IBC40

MODEL	VOLTS	MAX CHARGE AMPS	EXC.VAT	INC.VAT
IBC7	12/24V	7A	£49.98	£59.98
IBC15	12V	15A	£46.99	£56.39
IBC20	12/24V	20A	£59.98	£71.98
IBC25	12/24V	25A	£89.98	£107.98
IBC40	12/24V	40A	£109.98	£131.98

Clarke GARAGES/WORKSHOPS

FROM ONLY £229.00 EX.VAT £274.80 INC.VAT

IDEAL ALL-WEATHER PROTECTION



BRIGHT WHITE INTERIOR

LENGTH UP TO 24'

- Ideal for use as a garage/ workshop • Extra tough triple layer weatherproof cover
- Heavy duty powder coated steel tubing • Ratchet tight tensioning

ZIP CLOSE DOOR

MODEL	SIZE (LxWxH)	EXC.VAT	INC.VAT
CIG81015	4.5 x 3 x 2.4M	£229.00	£274.80
CIG81020	6.1 x 3 x 2.4M	£279.00	£334.80
CIG81216	4.8 x 3.7 x 2.5M	£279.00	£334.80
CIG81220	6.1 x 3.7 x 2.5M	£349.00	£418.80
CIG81224	7.3 x 3.7 x 2.5M	£419.00	£502.80

Clarke INDUSTRIAL AIR COMPRESSORS

Top quality belt driven air compressors for industrial & commercial users inc; garages, factories, workshops and farms. 10 bar/150psi max working pressure

UK BUILT

CAST IRON PUMP



FROM ONLY £425.00 EX.VAT £510.00 INC.VAT

XEV16/100

†V-Twin *230V

MODEL	AIR DISP. cfm	MOTOR (HP)	AIR RECEIVER	EXC. VAT	INC .VAT
XEV16/100†*	14	3	100ltr	£425.00	£510.00
XEV16/150†*	14	3	150ltr	£459.00	£550.80
XEV16/200(OL)†*	14	3	200ltr	£525.00	£630.00
XEV16/150(400V)†	14	3	150ltr	£535.00	£642.00
XE18/200 (OL)*	18	4	200ltr	£579.00	£694.80
XET19/200 (OL)*	18	4	200ltr	£619.00	£742.80
XEV26/200†	23	5.5	200ltr	£739.00	£886.80
XE37/270 (OL)*	36	2x 4	270ltr	£1169.00	£1402.80

Clarke DIESEL HOT WASHER

HARRY HOTWASH

Ideal for effective cleaning of vehicles with a hot jet of up to 80°C



145 Bar 2103 psi

AMAZING LOW PRICE!

MASSIVE PRICE CUT £479.00 EX.VAT £574.80 INC.VAT WAS £598.80 INC.VAT

INC. CONTAINER FOR DETERGENT

Clarke JUMP STARTS

Provides essential home, garage and roadside assistance • Integral work light • 910 /JS1100C include air compressor • Long life battery



FROM ONLY £64.99 EX.VAT £77.99 INC.VAT

EXTRA LONG 1m LEADS

MODEL	STARTING BOOST	PEAK AMPS	EXC. VAT	INC. VAT
900	400	900	£64.99	£77.99
JS1100	500	1100	£69.98	£83.98
910	400	900	£72.99	£87.59
JS1100C	500	1100	£79.98	£95.98
4000	700	1500	£139.98	£167.98
JS12/24	1000	2000	£159.98	£191.98
JS12/24Li	600	1200	£179.98	£215.98

CAR TRANSPORTER LASHING

UK MADE



£19.98 EX.VAT £23.98 INC.VAT

5000KG CAPACITY

TURBO AIR COMPRESSORS



airmaster

NEW

FROM ONLY £89.98 EX.VAT £107.98 INC.VAT

- Superb range ideal for DIY, hobby & semi -professional use

8/260

*'V' Twin Pump #Oil free

MODEL	MOTOR	CFM	TANK	EXC.VAT	INC.VAT
8/260	2HP	7.5	24ltr	£89.98	£107.98
7/250	2 HP	7	24ltr	£94.99	£113.99
11/260	2.5HP	9.5	24ltr	£109.98	£131.98
8/550	2HP	7.5	50ltr	£119.98	£143.98
7/510#	2HP	7	50ltr	£119.98	£143.98
11/550	2.5HP	9.5	50ltr	£139.98	£167.98
16/550* NEW	3HP	14.5	50ltr	£199.98	£239.98
16/1050* NEW	3HP	14.5	100ltr	£249.98	£299.98

Clarke MICRO JUMP STARTS



FROM ONLY £49.98 EX.VAT £59.98 INC.VAT

JSM200

- Ideal for starting cars, charging phones, etc.

MODEL	START BOOST	PEAK BOOST	EXC.VAT	INC.VAT
JSM200	200A	400A	£49.98	£59.98
JSM300	300A	500A	£64.99	£77.99
JSM350	350A	500A	£84.99	£101.99

Clarke ENGINE STANDS

PRICE CUT NOW FROM £42.00 EX.VAT £51.50 INC.VAT WAS £59.98 inc.VAT



CES680F

- Rotates through 360° Fully tested to proof load

MODEL	CAPACITY	EXC. VAT	INC. VAT
CES340 ‡	340kg	£42.99	£51.59
CES450	450kg	£64.99	£77.99
CES560	560kg	£79.98	£95.98
CES680F*	680kg	£99.98	£119.98

‡ was £59.98 inc.VAT

*Folds for storage

Clarke 20SPS12

WARRIOR WINCHES

FROM ONLY £84.99 EX.VAT £101.00 INC.VAT

MODEL	CAPACITY	EXC.VAT	INC.VAT
20SPS12	907kg	£84.99	£101.99
35SPS12	1588kg	£129.98	£155.98
800SS12	3936kg	£349.00	£418.80

UP TO 7938KG CAPACITY IN STOCK

Clarke WORKSHOP AIR TOOLS

£26.00 EX.VAT £32.30 INC.VAT

PGF14

CAT131



£64.00 EX.VAT £77.00 INC.VAT

HEAVY DUTY

BEST SELLER

HUGE CHOICE IN-STORE/ONLINE

Clarke CRANES



BEST SELLER

FROM ONLY £164.99 EX.VAT £197.00 INC.VAT

MODEL	DESC.	EXC.VAT	INC.VAT
CFC100	1 ton fold	£164.99	£197.99
CFC1000LR	1 ton long reach	£219.00	£262.80

Fully tested to proof load

CFC100

- Folding and fixed frames available
- Robust, rugged construction
- Overload safety valve

Clarke STRUT SPRING COMPRESSOR



£129.00 EX.VAT £155.00 INC.VAT

- Foot operated hydraulic powered
- Adjustable for springs up to 400mm dia. & 520mm in length
- Adjustable spring retainers
- Inc. spring retaining guard

SSC1000G

Clarke 2 & 3 TONNE TROLLEY JACKS

FROM ONLY £29.98 EX.VAT £35.98 INC.VAT



HIGH LIFTS UPTO 465mm

CTJ3000QLB

MODEL	TYPE	TONNE	EXC.VAT	INC.VAT
CTJ2L	Long	2	£29.98	£35.98
CTJ2000LPB	DIY Low Profile	2	£33.99	£40.79
CTJ2250Q	Quick Lift	2.25	£34.99	£41.99
CTJ2250LP*	Low Profile	2.25	£39.98	£47.98
CTJ3000GB	Pro Garage	3	£79.98	£95.98
CTJ3000QLB	Quick Lift	3	£86.99	£104.39
CTJ30LG	Pro Instant Lift	3	£99.95	£119.94
CTJ3000G	Pro Garage	3	£99.98	£119.98
CTJ2QLP	Low Quick Lift	2	£114.99	£137.99
CTJ1500QULP	Ultra Low Quick Lift	1.5	£156.99	£188.39

* CTJ2250LP has a 2.25 tonne capacity, has a low entry of only 80mm and includes 2 sockets

FARM JACKS

£54.00 EX.VAT £65.00 INC.VAT

- Max Load 2000kg

2 TONNE CAPACITY

CFJ48

Clarke 5 TONNE FORKLIFT/TRACTOR JACK - CFT5B

ONLY £169.98 EX.VAT £203.98 INC.VAT

LOW LIFTS FROM 70mm

HIGH LIFTS UPTO 730mm

1M 4X4 VEHICLES AND COMMERCIAL VEHICLES



Clarke PRESSURISED SANDBLASTERS

- Heavy duty steel construction sandblasters for the quick removal of surface rust, paint, dirt/grease etc.

CPSB100B

INCLUDES SANDBLASTING GUN, DELIVERY HOSE, 4 CERAMIC NOZZLES AND SAFETY HOOD

FROM ONLY £139.00 EX.VAT £167.00 INC.VAT



MODEL	TANK VOLUME	FLOW RATE REQ.	EX. VAT	INC.VAT
CPSB100B	32 litre	6-25 cfm	£139.99	£167.99
CPSB200B	63 litre	6-25 cfm	£169.99	£203.99

Clarke DRILL PRESSES

- Range of precision bench & floor presses for enthusiast, engineering & industrial applications

FROM ONLY £69.98 EX.VAT £83.98 INC.VAT

B = Bench mounted F = Floor standing

CDP152B



MODEL	MOTOR (W) SPEEDS	EXC. VAT	INC. VAT
CDP5EB	350 / 5	£69.98	£83.98
CDP102B	350 / 5	£79.98	£95.98
CDP152B	450 / 12	£149.98	£179.98
CDP202B	450 / 16	£189.00	£226.80
CDP10B	370 / 12	£199.98	£239.98
CDP352F	550 / 16	£229.00	£274.80
CDP452B	550 / 16	£239.00	£286.80
CDP502F	1100 / 12	£569.00	£682.80

PAY Monthly NO DEPOSIT

- Over 18, 24 or 36 months
- From only £300 minimum spend*
- 18.9% Rep. APR

5 MIN APPLICATION!

VISIT YOUR LOCAL SUPERSTORE

OPEN MON-FRI 8.30-6.00, SAT 8.30-5.30, SUN 10.00-4.00

BARNSLEY Pontefract Rd, Barnsley, S71 1EZ	01226 732297	**EXETER** 16 Trusham Rd. EX2 8QG	01392 256 744	**NORWICH** 282a Heigham St. NR2 4LZ	01603 766402
B'HAM GREAT BARR 4 Birmingham Rd.	0121 358 7977	**GATESHEAD** 50 Lobley Hill Rd. NE8 4YJ	0191 493 2520	**NORTHAMPTON** 4B, Beckett Retail Park NN5 5JW	01604 267840
B'HAM HAY MILLS 1152 Coventry Rd, Hay Mills	0121 7713433	**GLASGOW** 280 Gt Western Rd. G4 9EJ	0141 332 9231	**NOTTINGHAM** 211 Lower Parliament St.	0115 956 1811
BOLTON 1 Thynne St. BL3 6BD	01204 365799	**GLOUCESTER** 221A Barton St. GL1 4HY	01452 417 948	**PETERBOROUGH** 417 Lincoln Rd. Millfield	01733 311770
BRADFORD 105-107 Manningham Lane. BD1 3BN	01274 390962	**GRIMSBY ELLIS WAY,** DN32 9BD	01472 354435	**PLYMOUTH** 58-64 Embankment Rd. PL4 9HY	01752 254050
BRIGHTON 123 Lewes Rd, BN2 3QB	01273 915999	**HULL** 8-10 Holderness Rd. HU9 1EG	01482 223161	**POOLE** 137-139 Bournemouth Rd. Parkstone	01202 717913
BRISTOL 1-3 Church Rd, Lawrence Hill. BS5 9JJ	0117 935 1060	**ILFORD** 746-748 Eastern Ave. IG2 7HU	0208 518 4286	**PORTSMOUTH** 277-283 Copnor Rd. Copnor	023 9265 4777
BURTON UPON TRENT 12a Lichfield St. DE14 3QZ	01283 564 708	**IPSWICH** Unit 1 Ipswich Trade Centre, Commercial Road	01473 221253	**PRESTON** 53 Blackpool Rd. PR2 6BU	01772 703263
CAMBRIDGE 181-183 Histon Road, Cambridge. CB4 3HL	01223 322675	**LEEDS** 227-229 Kirkstall Rd. LS4 2AS	0113 231 0400	**SHEFFIELD** 453 London Rd. Heeley. S2 4HJ	0114 258 0831
CARDIFF 44-46 City Rd. CF24 3DN	029 2046 5424	**LEICESTER** 69 Melton Rd. LE4 6PN	0116 261 0688	**SIDCUP** 13 Blackfen Parade, Blackfen Rd	0208 3042069
CARLISLE 85 London Rd. CA1 2LG	01228 591666	**LINCOLN** Unit 5. The Pelham Centre. LN5 8HG	01522 543 036	**SOUTHAMPTON** 516-518 Portswood Rd.	023 8055 7788
CHELTENHAM 84 Fairview Road. GL52 2EH	01242 514 402	**LIVERPOOL** 80-88 London Rd. L3 5NF	0151 709 4484	**SOUTHEND** 1139-1141 London Rd. Leigh on Sea	01702 483 742
CHESTER 43-45 St. James Street. CH1 3EY	01244 311258	**LONDON CATFORD** 289/291 Southend Lane SE6 3RS	0208 695 5684	**STOKE-ON-TRENT** 382-396 Waterloo Rd. Hanley	01782 287321
COLCHESTER 4 North Station Rd. CO1 1RE	01206 762831	**LONDON** 6 Kendal Parade, Edmonton N18	020 8803 0861	**SUNDERLAND** 13-15 Ryhope Rd. Grangetown	0191 510 8773
COVENTRY Bishop St. CV1 1HT	024 7622 4227	**LONDON** 503-507 Lea Bridge Rd. Leyton, E10	020 8558 8284	**SWANSEA** 7 Samlet Rd. Llansamlet. SA7 9AG	01792 792969
CROYDON 423-427 Brighton Rd, Sth Croydon	020 8763 0640	**LUTON** Unit 1, 326 Dunstable Rd, Luton LU4 8JS	01582 728 063	**SWINDON** 21 Victoria Rd. SN1 3AW	01793 491717
DARLINGTON 214 Northgate. DL1 1RB	01325 380 841	**MAIDSTONE** 57 Upper Stone St. ME15 6HE	01622 769 572	**TWICKENHAM** 83-85 Heath Rd.TW1 4AW	020 8892 9117
DEAL (KENT) 182-186 High St. CT14 6BQ	01304 373 434	**MANCHESTER ALTRINCHAM** 71 Manchester Rd. Altrincham	0161 9412 666	**WARRINGTON** Unit 3, Hawley's Trade Pk.	01925 630 937
DERBY Derwent St. DE1 2ED	01332 290 931	**MANCHESTER CENTRAL** 209 Bury New Road M8 8DU	0161 241 1851	**WIGAN** 2 Harrison Street, WN5 9AU	01942 323 785
DONCASTER Wheatley Hall Road	01302 245 999	**MANCHESTER OPENSHAW** Unit 5, Tower Mill, Ashton Old Rd	0161 223 8376	**WOLVERHAMPTON** Parkfield Rd. Bilston	01902 494186
DUNDEE 24-26 Trades Lane. DD1 3ET	01382 225 140	**MANSFIELD** 169 Chesterfield Rd. South	01623 622160	**WORCESTER** 48a Upper Tything. WR1 1JZ	01905 723451
EDINBURGH 163-171 Piersfield Terrace	0131 659 5919	**MIDDLESBROUGH** Mandale Triangle, Thornaby	01642 677881		

5 EASY WAYS TO BUY...

- SUPERSTORES NATIONWIDE
- ONLINE www.machinemart.co.uk
- TELESALES 0115 956 5555
- CLICK & COLLECT OVER 10,500 LOCATIONS
- CALL & COLLECT AT STORES TODAY

Calls to the catalogue request number above (0844 880 1265) cost 7p per minute plus your telephone company's network access charge. For security reasons, calls may be monitored. All prices correct at time of going to press. We reserve the right to change products and prices at any time. All offers subject to availability, E&OE. *Terms & conditions apply see machinemart.co.uk/finance for more details

LAND ROVER LEGENDS

30



THE RANGE ROVER

The Range Rover may not have been the first SUV, but it certainly took the idea to new levels of performance and desirability. What is remarkable is how few people were involved in creating it...

STORY BY GARY PUSEY

PICTURES: THE GARY PUSEY COLLECTION AND ROGER CRATHORNE



MANY hundreds of people in JLR and its suppliers are working on the new Range Rover. It's expected to be revealed in 2021 and will be the fifth generation since the original was launched to the world in June, 1970. Back then, no one had seen anything quite like the Range Rover. Sure, there were things like the International Harvester Scout, the Willys Jeep Wagoneer and the Ford Bronco, but none came close to the Range Rover in terms of off-road capability, on-road performance and style. Journalists were universally impressed, astonished and positive. Rover couldn't make enough of their new vehicle to satisfy demand and in the early years they didn't even have to bother with advertising. Secondhand examples sold for more than the list price of a new vehicle.

In almost no time at all it was a car that was associated with good taste, the well-to-do country set, the aristocracy, and royalty. Her Majesty the Queen drove one of the press launch vehicles and advice was offered to Rover regarding the loadspace and how it could be made more comfortable for the corgis. HRH The Duke of Edinburgh was famously photographed standing on the lowered tailgate of a Range Rover at a sporting event. John Steed was known to drive one in The Avengers, as did the rather posh Lady Jane Felsham in Lovejoy. It seemed like everybody wanted to own a Range Rover. And it stayed that way for years.

In truth, the early Range Rovers were pretty agricultural to drive, rolled like a ship in a storm and didn't have an ounce of luxury in them until the 1980s. Courtesy of the horror that was British Leyland, the Range Rover was regularly starved of development funding to the extent that a four-door version did not appear until 1981 and a diesel only in 1986, despite clear indications that these were what customers had been wanting for years. And, as today's enthusiasts,



100/6 starred in launch ‘lifestyle’ photos



Brand-new NXC 245H at Blue Hills in 1970



preservationists and restorers have discovered, no one at the factory spent much time thinking about corrosion-proofing. But that didn’t stop it being a very accomplished off-road vehicle and an extraordinarily desirable and aspirational motor car. I’d yearned for one since I was old enough to think about it!

Bizarrely, given that it was the fast-growing market for leisure 4x4s in the USA that had played a significant part in the decision to put the Range Rover into production, the vehicle was actually 17 years old before it was finally launched in North America. The marketing and PR plans were pure genius, though, associating the Range Rover with an almost mythical view of British life that revolved around old money, country houses, horses, shooting, boats and polo. The Range Rover was an immediate sales success there, and the North American market remains a crucially important one for JLR to this day.

By the time the fourth generation appeared in 2012 the Range Rover’s reputation as the world’s most accomplished, capable and luxurious SUV was firmly established. Jeremy Clarkson is a serial Range Rover owner and has described it many times as the best car in the world. But something had changed along the way, and Clarkson summed it up nicely in Top Gear magazine in 2013 when he wrote, perhaps with his tongue only partly in his cheek: “Many different sorts of people buy Range Rovers. Footballers. Footballers’ wives. Footballers’ mistresses. Drug dealers. Farmers. Businessmen. Americans. And each will have their own reasons for doing so. But, deep down, there’s just one: they all want to be the Duke of Marlborough.

“In truth, the early Range Rovers were pretty agricultural to drive, rolled like a ship in a storm, and didn’t have an ounce of luxury until the 1980s. And as today’s enthusiasts have discovered, no one spent much time thinking about corrosion-proofing”

“That’s what happens with a Range Rover. You can fill the boot with kids’ toys, drugs – anything you like – but, in your dreams, it’s actually full of two handmade English shotguns and a daft old black Labrador. Well, last weekend, I found myself in the company of various Range Rover drivers who really did have a boot full of barking dogs and dead birds. And all were very keen to see what the new model was like. ‘Disgusting’ was the word they used most often.

“The trouble is that Land Rover’s head of styling is not a man who you can visualise in muddy wellies and a 40-year-old Barbour jacket. And that shows in the car he’s created. Let me give you an example. When you unlock the doors, lamps illuminate under the door mirrors to provide a puddle of light. Good idea. Means you won’t accidentally step in one of the dog’s turds.

“However, I’m sad to report that picked out in the puddle of light was the motif ‘Range Rover’. And this, I’m afraid, is simply ghastly. There’s a similar problem with the lighting on the inside. There’s too much of it. And there’s a feature which allows you to choose what colour you’d like it to be. Red. Blue. Purple. Green. White. Gold. This list is endless. My daughter thought this was tremendous fun, and I don’t doubt Abbey Clancy will love it too. But they’re not the Duke of Marlborough.

“Behind the scenes, the new Range Rover is a masterpiece. It’s a full half a tonne lighter than the last model, which means it’s faster and more fuel-efficient. But despite the crash diet, it still feels solid and as heavy as a blue blood pudding. So it’s a better-built, nicer to drive, updated version of a car I love. Which is then spoiled by trinketry. And a range of colours which may well look great outside the wine bars of Wilmslow, but which don’t work at all in a Duke’s wood.

“I can understand why they’ve done this. Because it’ll go down well with 99.9 per cent of their customers. Most rich people have no taste at all. But, as I said earlier, the rich people who buy Range Rovers are buying what they see as a passport to Toff Town. And the new model is so chintzy, the toffs will be buying something else.”

How different it all was in 1970. Back then, if the toffs had a need for an off-road vehicle it would have been a Series Land Rover because there really wasn’t anything else. They’d have had a soft spot for it but they wouldn’t have driven it very far on the road because it was too slow and uncomfortable. They’d have had a large, luxurious saloon for



YVB 153H in North Wales during the filming of A Car for All Reasons

that. And probably a chauffeur. But it all changed when the Range Rover came along.

Much has been written over the years about how the idea for the Range Rover came about in the first place. The truth seems to be that there were two separate threads that happily came together and reinforced each other. The first was an initiative led by Rover's managing director, William Martin-Hurst, to explore the options for an additional Land Rover model. Charles Spencer King, known as Spen, was the head of the Rover Company's New Vehicle Projects (NVP) team and he came up with an idea for a new vehicle.

The story goes that in late 1965 he'd driven one of the company's then-new Rover 2000 saloons across farmland around the Solihull factory. He thought that its long-travel coil suspension could be used in a new Land Rover to create something that would provide a much-improved ride off-road but also be able to perform better on the road. King discussed it with his colleague Gordon Bashford, who sketched out some ideas that bore a striking resemblance to what eventually emerged as the production vehicle. The resulting outline design had a wheelbase of 99.5 inches, which they rounded up to 100. The Land Rover 100 inch Station Wagon was born.

The second element was market research carried out in the USA in 1965 by Graham Bannock, who was the Economic Adviser to William Martin-Hurst. Bannock was responsible for market research and statistics and at that time was investigating market trends and their potential impact on future Rover products. Over the years, Spen King has frequently been quoted as crediting Graham Bannock with the Range Rover concept, but Bannock himself has corrected this, writing: "Certainly my report dated mid-1965 drew attention to the rapid growth in the leisure market for 4x4s and the demand for car-type comforts in them. But I did not spell-out the Range Rover concept in detail until a memo dated July 20, 1966, and by this time, unbeknownst to me, Engineering were already working on it."

The reality is that the research results, and Bannock's analysis of them, happily reinforced the arguments in favour of a vehicle that was already being developed in the NVP 'skunk-works'. The final fortuitous piece of the jigsaw was the availability by 1967 of the Buick 3.5-litre V8 engine, the rights to which Martin-Hurst had acquired from General Motors, which meant the 100 inch Station Wagon would have an engine man enough for the job.





Spen King and Gordon Bashford were the originators of the Range Rover

"Much has been written about how the idea for the Range Rover came about. The truth seems to be there were two separate threads that came together. The first to explore options for an additional Land Rover model, the second market research carried out in USA"

Graham Bannock was also involved in the commissioning of market research on the new vehicle, which was codenamed Oyster, and this sought the opinions of a sample of people identified as potential buyers. The research was carried out by the independent Bureau of Commercial Research and involved interviews with 423 people who owned estate cars costing over £700 or Rover and other saloon cars costing over £900. There were no finished vehicles to show the respondents so photographs of the designs were used, which is a notoriously dangerous way to carry out research, simply because buyers do not necessarily know what they want until they see it! And even when they have looked at it and decided that they want it, they can subsequently be swayed quite dramatically by other factors such as advertising or other people's opinions.

Nevertheless, Graham Bannock's research provided sufficient encouragement that Oyster could be a success. The idea of four-wheel drive went down well, although there were strong opinions even at this early stage regarding the need for four doors, a requirement for luxury features, and a dislike of the split tailgate! Interestingly, the final vehicle ignored all three of these although fortunately this did no apparent harm to sales, at least in the early years, and of course the split tailgate became a much-loved signature feature of the Range Rover that exists to this day.

In 1967 Rover was acquired by Leyland Motors and the



The very first Range Rover in 1967. Little was needed to perfect the original design

following year Leyland Motors merged with British Motor Holdings to form British Leyland. One immediate consequence was that in April 1968 Spen King found himself transferred to Triumph. Peter Wilks, Rover's Technical Director and Spen's boss, took personal control of NVP and the 100 inch project. Spen and Peter were cousins and both were nephews of brothers Spencer and Maurice Wilks, who had guided Rover with great success since the 1930s. Peter Wilks is often overlooked in the story of the development and launch of the Range Rover, perhaps because he was forced to retire through ill-health in 1971. He died the following year aged just 52.

It is also interesting that the development of the Range Rover was led by NVP rather than by Land Rover's own engineering team, and most historians today believe that this was for three reasons. Firstly, because Spen King was a relatively young and creative engineer who had demonstrated his ability to think out of the box with the earlier Rover Gas Turbine car project; secondly, because the project was seen to be so important that the Wilks family, who controlled Rover at the time, wanted a member of the inner circle to lead the project; and thirdly, because Land Rover's chief engineer, Tom Barton, was known to be wedded to certain principles such as leaf springs, and there was concern that he would not be sufficiently forward-thinking.

Nevertheless, Spen King considered it prudent to have someone from Land Rover Engineering on the 100 inch project and in July 1966 Tom Barton decided to assign Geof Miller, who had been Project Engineer for Basic Land Rovers with responsibility for the development of the existing models. Miller was to become Project Engineer for the Range Rover and remained in this role until 1971, the year after the Range Rover was launched. He was heavily involved in addressing what were seen to be quite serious issues with the new vehicle, including gearbox and axle problems, and priority was given to those that were likely to leave a prospective owner broken down beside the road.



Design studio scale model 1967

Shortly after Geof Miller joined the team, Nick Wilks, who was the son of Rover's Chairman Spencer Wilks, became Miller's Technical Assistant and spent most of his time carrying out technical comparisons with the potential competitors to the 100 inch such as the Ford Bronco and the Jeep Wagoneer. Nick Wilks left the Engineering Department towards the end of 1967, and two new Technical Assistants were assigned to the project: Roger Crathorne, who had just completed his apprenticeship with Rover, and Alan Wood.

Also working for Geof Miller were chassis designer Phil Banks and body designer Phil Jackson. It was Jackson who insisted that the team could design their own body for the very first 100 inch Station Wagon, chassis 100/1, thus averting the purchase of a Vauxhall Victor Estate body which had been seriously considered as a quick solution to the problem. Some unofficial support for the initial body design was provided by David Crompton, who was part of Rover's main design team led by David Bache. Later, Miller's team was strengthened further by the appointment



Geof Miller was Range Rover Project Engineer



Roger Crathorne was Technical Assistant

12 MOMENTS IN TIME



1967

The first 100 inch Station Wagon Engineering Prototype is completed.

1970

The Range Rover is launched to the world – in Cornwall.


David Bache with early design drawings


Tony Poole was responsible for final styling and the name


Engineering Prototype 100/3 the first to carry production body design


Prototype 100/4 during filming of A Car for All Reasons

of John Orgill as Assistant Project Engineer and by Technical Assistants Malcolm Ainsley, Rod Gill and Vyrnwy Evans.

By the end of 1968 the company had two Engineering Prototypes undergoing testing and development, although neither of them looked exactly like the final production design. In December that year Peter Wilks attended a confidential internal meeting to discuss 'the concept, specification, launch, pricing and potential markets for the new vehicle'. The minutes of the meeting quote him as saying: "The 100 inch Land-Rover was conceived about three years ago when the Company was assessing future Land-Rover development. The market for a work-horse type of vehicle appeared to be steady and the real growth could well be the four-wheel drive leisure market, which is largely untapped." Wilks went on to describe some of the vehicles competitive with the 100 inch and concluded that "Rover should be able to produce a superior vehicle".

Wilks declared his support for the new vehicle in pretty robust terms, again recorded in the minutes: "Mr Wilks stated that in his opinion the present Land-Rover sells because it is rugged and durable, and also because Rover are willing to produce vehicles to suit customer requirements. However, although the present Land-Rover is neither comfortable, economical to run, nor safe, many people do buy it for leisure purposes. He is convinced that there is a potential for the 100 inch with all the above qualities which the present Land-Rover does not possess. Mr Wilks feels confident that we should be able to sell 200 to 350 per week."

Another important decision taken at the December meeting related to the name of the new vehicle, and the minutes of the meeting state there were two schools of thought. "The first is that the 20 years of goodwill surrounding the name 'Land-Rover' should not be discarded, whilst the second regarded the vehicle as a completely new concept which should be promoted as such. Both Sales and Engineering supported the second school and generally agreed that 'Range Rover' would be a suitable name." It was Tony Poole, who headed the Land Rover part of David Bache's Rover design team, who came up with the Range Rover name. As an aside, Tony is also immortalised for his inspiring work in turning the slab-sided Series I into the shapely and wonderfully resolved Series II, a design that remained largely untouched until the end of Defender production in 2016.

The 100 inch development programme continued and by

1981

The In Vogue two-door is announced and is the first conscious attempt to take the Range Rover upmarket. Four-door introduced later that year.



1982

4-door 'In Vogue' introduces the Chrysler Torque-flite automatic transmission, replaced by the ZF 4-speed in 1985.

1986

Range Rover is provided with a diesel engine for the first time, bought in from VM in Italy.



100/6 in Morocco in 1969 carrying Velar badges. Now the oldest surviving Range Rover

the time the third Engineering Prototype appeared in the spring of 1969, David Bache's styling department, and in particular Tony Poole, had finessed the original body design in a relatively small number of nevertheless significant ways, and the body on 100/3 looked identical to the final production vehicles. The design was nigh-on perfect from the outset and has proved to be remarkably timeless. An early vehicle was exhibited at the Louvre in Paris as an example of exemplary industrial design. In fact, I think a two-door Range Rover is becoming an even more attractive design with every passing year and every additional piece of unnecessary bling that appears on its more youthful descendants.

All seven Engineering Prototypes were registered as Velars in an attempt to hide their origins and keep the Range Rover name under wraps. All but three of the 27 pre-production vehicles that followed were also registered as Velars, as were the 20 vehicles built in April and May, 1970, for the press launch. It is unclear exactly how many of these vehicles actually carried Velar badging when they were out on the public highway, but photographs show that a number of the Engineering Prototypes certainly did.

Testing of the new vehicle was, it is fair to say, considerably less sophisticated and intensive than an equivalent programme would be today. Obviously, there was a great deal of driving on public roads and a lot of off-road testing, as well as extensive use of the MIRA facility, but there was also a pioneering expedition to the Sahara in late 1969.

Today, the Sahara Trials are part of Range Rover folklore. In November 1969, Engineering Prototypes 100/5 and 100/6 were flown to El Golea in Algeria for the start of durability trials in Algeria, Niger and Morocco, including reconnaissance for a planned press and dealer launch route in Morocco that was scheduled for late 1970. In fact, the launch of the Range Rover was brought forward to June that year and held in the rather more prosaic surroundings of Cornwall.

"Spen King was never happy with the direction Range Rover took in late years. Graham Bannock wrote: 'To Spen, it was annoying he had designed a go-anywhere vehicle but that many of the suburbanite buyers thought of it as a social standing"

The 1969 durability trials involved two crossings of the Sahara and was led by Mike Foster, the Field Operations Manager for Minitrek Expeditions, a Kingston-based specialist trekking company that had been retained to assist with the trip. A Pathé News film crew also accompanied the team and took extensive footage of the vehicles that was later used in the two Rover promotional films, Sahara South and A Car for All Reasons.

The Rover team was led by Assistant Chief Engineer Philip Crowther driving 100/6 and Assistant Project Engineer John Orgill driving 100/5. Engine testing was overseen by John Biddle and transmission testing by Alan Jeffrey. Experimental Department Fitter Alf Davies and Rover Mileage Driver Dennis Patstone were driving the support vehicle, which was a Series II 109 inch fitted with a Range Rover engine and gearbox.

The first leg of the expedition took the vehicles south from El Golea via In Salah to Tamanrasset and then across the border into Niger and on to Agadez. From there the team headed east across the wilderness of the Ténéré desert to Bilma before returning north and back into Algeria, finishing at Ghardaia where Geof Miller and Roger Crathorne joined the group to commence the second leg west into Morocco. It covered some 3500 miles and was a resounding success.

At the end of May 1970, all 20 of the vehicles that had been specially built for the press launch were loaded onto

1987

The Range Rover is launched in North America with an innovative and pioneering marketing and PR campaign. It is a great success.



1990

The limited edition two-door CSK is launched and successfully tests the market for a sporty and even more luxurious Range Rover and introduces the 3.9 engine.

1992

The company's in-house 200Tdi engine is introduced, followed by the 300Tdi in 1994.

1992

LSE is launched with extended 108 inch wheelbase and 4.2-litre V8.



YVB 153H and film crew at Henley-in-Arden in 1970



Competitor comparisons at Solihull: Land Cruiser FJ55



Geof Miller kicks up the dust in NXC 235H during the press launch

transporters at Solihull and delivered to Cornwall. They had only been registered on May 27 but by the 28 they were at the Meudon Hotel in the village of Mawnan Smith, near Falmouth, which was to be their base for the next 12 days.

The press launch itself took place over six days, with the first of the three groups of journalists attending from Monday June 1 and leaving the following day, the second group on the Wednesday and Thursday, and the final group on the Friday and Saturday. The story was embargoed until June 17 to ensure that no journalists had the ability to create a scoop to the disadvantage of their colleagues, and that's why the 17th is generally regarded as the official launch date of the Range Rover.

The company was keen to demonstrate the new vehicle's road manners and its maximum performance as well as its off-road capabilities, so there was a road circuit which took the journalists to the Blue Hills mine on the north Cornwall coast, which in those days was regularly used as a trials course for motorcycles and cars. More on-road driving took them to the RAF airfield at St Eval near Padstow, where the disused runway provided the perfect place to explore the Range Rover's high-speed capability.

On the way back to the hotel there was an afternoon stop at the Duchy of Cornwall's oyster farm on the Helford river, and photographs show the gentlemen of the press (there were no female motoring writers in evidence; a sign of the times) enjoying oysters washed down with what appear to be black velvet cocktails, which is something you can be certain you will not see at a modern press event, at least until the keys have been handed back!



Press launch 1970: Duchy of Cornwall Oyster Farm

So what exactly did the journalists of the day say about the new Range Rover? Here are some of my favourites... "The Range Rover is probably the most truly advanced vehicle I've driven in a decade... Streets ahead of anything else of its kind in the world" (Tony Bostock, Hot Car magazine). "Without question the Range Rover is unique. An 8-cylinder, 8-speed, 5-seat, 4-wheel drive, 3-door, 2-reverse, go-anywhere station wagon with good looking, light alloy bodywork and all the toughness and dependability inherited from Land Rover. A sure winner, I'm sure" (Cyril Posthumus, Road & Track magazine).

And the renowned Ronald 'Steady' Barker was extraordinarily prescient when he wrote in Car magazine: "If the Range Rover is not the vehicle you have always promised yourself, maybe that's because you have never thought of it, or imagined so much could be combined on one set of four wheels. Traffic dozer, trail blazer or luxury status symbol? The V8 Range Rover looks like being all things to most men."

Sadly, Spen King was never happy with the direction the Range Rover took in later years. Graham Bannock wrote: "To Spen, it was annoying that he had designed a true go-anywhere vehicle but that many, if not most, of the Range Rover's suburbanite buyers thought of it simply as a mark of their social standing." Which is probably as true today as it's ever been.



1993

The Autobiography is launched as the ultimate personalisation programme: special paint and trim choices, and even a 4.2 engine option. The new soft dash is introduced.

1995

Imminent end of production is commemorated by the 25th Anniversary Final Edition. Only 25 individually-numbered vehicles are made.

1996

The last Range Rover classic is driven off the production line by Noel Edmonds.

TReK FI



In January this year eight teams from the US and Canada competed for the final of Land Rover TReK. Nick Dimbleby reports

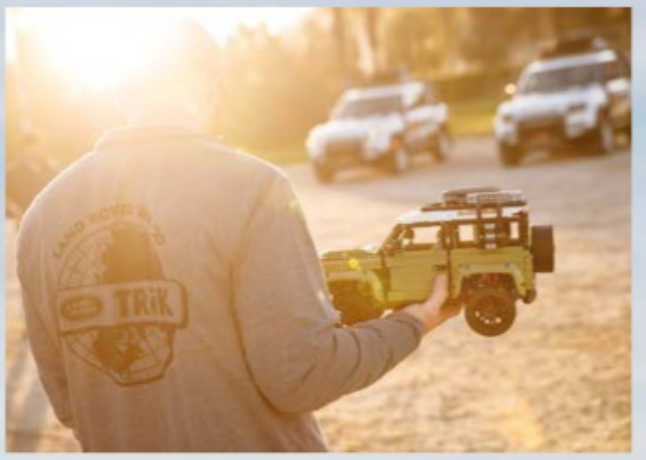
AS the sun rose above Palm Springs, California, on a surprisingly chilly January morning, teams of three JLR retailer employees from the US and Canada made their way out to a car park in Indian Wells, where eight factory fresh Land Rover Defenders were lined up ready and waiting for the day's activities.

Most teams had not had much sleep, as Land Rover TReK 2020 had formally started 15 hours earlier, when each group had been handed an unopened kit of the Lego new Defender and were told that the only way that they'd be getting the keys to the real thing, was to build the Lego one in time for the morning. The best team did it in just over nine hours, the worst, er, didn't manage to finish...

Each of the teams competing in the TReK 2020 Finals had won their place during the preliminary heats back in September last year. As such, this was the best of the best, so expectations were high. Not finishing the Lego model wasn't a great start for the team who will remain nameless, but even though they were allowed to start, it was highly unlikely that they were going to win after that.

Unlike the TReK heats, which took place at the Land Rover Experience Centre at the Biltmore Estate, the TReK 2020 final took place in and around the mountains and desert near Palm Springs, with competitive activities running sequentially to form a circular route. Each team was flagged off from the start ten minutes apart, and to ensure that there was no speeding or short cuts, there were regular checkpoints and times to adhere to; with teams losing points if they arrived late or – worse – early, to a competition location.

NALS



PICTURES: NICK DIMBLEBY

As per the TReK heats, none of the teams had any idea what was in store for them during the day, but as they were given the keys to their vehicle (a fully liveried TReK 2020 Defender, with winch, off-road tyres and roof rack), I think it's fair to say that they had their mind on other things. These 24 individuals, made up of technicians and salesmen from retailers all over America and Canada were among the first people to drive the new Defender outside of Land Rover. That in itself was enough of a prize for many of them!

Competition one was to drive to a GPS co-ordinate that was situated off tarmac, then take a dramatic photo of the teams' recently completed Lego Defender. Points were awarded for composition and vehicle positioning, with extra marks awarded for axle articulation and a good background.

Next in the competition book was a mini abseil down a rock face, taking care not to land in the waterfall or small pond next to it. To get there, there was a dirt track with a few rough rocky sections that demanded a little care. The Defender made it look easy though, especially with the air suspension raised to its highest.

The next task was a TReK classic, with a number of Land Rover historical and technical questions that tested the retailers' knowledge of the brand and the new Defender. Furthering retailers' knowledge of Land Rover and its products is one of the reasons behind TReK, so this part of the competition was hotly contested.

As the day progressed, the activities became more physically and mentally challenging. Section four appeared to be a simple cross country run to a GPS co-ordinate where the teams had to locate a prepaid gift card. Straightforward, apart from that the terrain was steep and it was virtually impossible to run or scramble to the point in a straight line. Confusion reigned on the next section too, which was a time/speed/distance drive on dirt tracks amongst trees, where the teams had to find a series of food items that their instruction booklet suggested that they might like to use the gift card to buy. What was coming next?



All competitors had to complete an abseil down a piece of rock during the competition



Ready for the off. The eight TReK-prepared Defenders waiting in the car park as the sun rose



Extra off-road equipment was useful for the buried tyre winching challenge

"NONE OF THE TEAMS HAD ANY IDEA WHAT WAS IN STORE FOR THEM"



TReK Defender gets its tyres dirty



The TReK route took in some great scenery

In the route between section six and section eight, the staggered convoy of vehicles dropped down off the mountain plateau, passing through the village of Idyllwild, where cryptic instructions suggested that the team might like to do a selfie in front of the totem pole in the middle of the village. This was also a golden opportunity to purchase the ingredients from the list acquired as part of challenge six. Unfortunately though, one team failed to find any of the locations where the ingredients were listed before running out of time. Another managed to find the locations and make the list – they just didn't bother to buy any of the items.

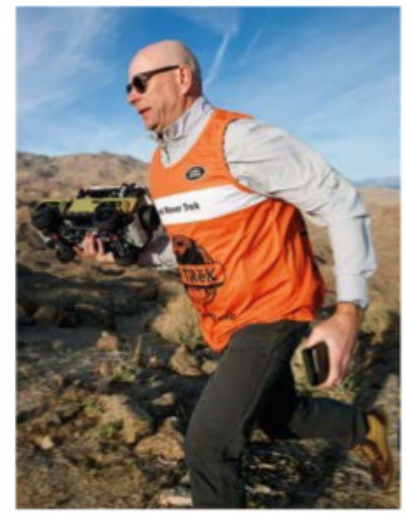
This, of course, meant that they immediately sacrificed their next set of points, as the next challenge was for the team to cook and eat three breakfast burritos using eggs, tortillas, beans and onion that they'd purchased earlier. Sadistically, the final task was particularly physical, so this was particularly harsh for the teams that had made extra large burritos.

It is well known that a good way to extract a vehicle that is seriously bogged down in sand, is to bury the spare wheel and then use the weight of the sand to winch the vehicle out of the hole. This is precisely what the eight teams had to do for their ninth and final challenge, but they had to work out the exact method to do so themselves.

After getting the Defender bogged in the soft sand (which wasn't an easy thing to do in itself), the competitors were told that they could use any of the equipment in or on the Defenders to move the vehicle forward uphill on the sand for a car length. The best solution was to remove the spare tyre from the roof, bury it deep in the sand, and then using the winch at the correct angle, the tyre would push hard against the sand and the vehicle would move itself up the hill. However, if the wheel was buried too shallow, or the winch cable was not angled correctly, then the spare wheel was pulled out of the ground by the winch and the team had to start again.







Above, L to R: Burrito cooking was one of the challenges; TReK Defender on standby; Lego Defender was one of the first challenges



The top three teams, along with JLR's Felix Bräutigam, Joe Eberhardt and David Wolfe

Having spent a lot of effort getting the wheel buried in the first place, only to see it pulled out all too easily by the winch, was soul destroying. After a bit of trial and error, all teams completed the challenge, it just took longer for some to get there than others.

With the sun set over the electricity generating windmills outside Palm Springs, the last team reached the finish line just as it was getting dark, and that was the end of TReK Finals 2020. It had been a hotly contested competition, with mistakes costing some the stronger teams their place at the top. In the end it was the Colorado-based team of Land Rover Roaring Fork that took first place, closely followed by Land Rover Buckhead and Land Rover Alexandria in third place.

All the participants were winners though, as they were lucky enough to drive the new Land Rover Defender before anyone else outside of Land Rover, and let's face it, that's as good a prize as any for these committed Land Rover employees and enthusiasts.

Getting ready to bury the spare wheel to use as a ground anchor in the sand

"TO SEE THE WHEEL PULLED OUT SO EASILY WAS SOUL DESTROYING"

Gaydon Land Rover Show

9-10 May

Hundreds of Land Rovers with arena entertainment, club displays and onsite camping.

• £8 advance vehicle entry •



BRITISH MOTOR MUSEUM

Book discounted tickets online at britishmotormuseum.co.uk/whats-on

J12 M40, Gaydon, Warwickshire, CV35 0BJ

fourplus4 LIMITED

Independent Specialists

Defender
Range Rover
Discovery
Freelander

For all Vehicle Sales, Repairs, Service, Parts & Accesories



Our range of services include vehicle sales, menu price servicing, tuning, repairs, modifying.

We supply and fit a full range accessories and replacement parts.

NEW Parts & Accessories Show Room

For further information contact us on:

Tel: 0113 243 8116

Sheepscar Street North, Leeds, LS7 2BX

www.landroverspecialists.com

4x4 & Vintage Spares Days

4X4 SPARESDAY.CO.UK LANDROVER & VINTAGE AUTOJUMBLE EVENTS

LOADS OF LAND ROVER & VINTAGE SPARES AT EACH EVENT!



200+ STALLS!

MALVERN

THREE COUNTIES SHOWGROUND

(Malvern, WR13 6NW)

SUN 19TH JULY (ALL OUTDOORS) & OCT 25TH 2020

NEWBURY

NEWBURY SHOWGROUND

(1/4 mile off J13M4/A34 • RG18 9QZ)

SUN APRIL 5TH & OCT 4TH 2020



800+ STALLS!

ALL ERAS OF LAND ROVER & 4X4 SPARES & ACCESSORIES, EX-ARMY SURPLUS AND EQUIPMENT, NEW ,USED AND OBSOLETE PARTS, AUTOJUMBLE, TRACTOR PARTS, BARN FINDS, YARD CLEARANCES, VINTAGE SPARES & PARTS

All venues lots of undercover trade space, further info call Mark Woodward on 016974 51882

ALL EVENTS: PREPAID OUTDOOR PLOTS £30, PREPAID INDOOR PLOTS NEWBURY £40 & MALVERN £35, PAY ON THE DAY ADD £5, BOOK ONLINE. ADMISSION ADULTS NEWBURY & MALVERN £7. UNDER15'S FREE. GATES OPEN NEWBURY 10AM, MALVERN 9AM.

BOOK YOUR PLOT ONLINE!!

www.4x4sparesday.co.uk

PETER JAMES INSURANCE 0121 506 6040 ...if it's important to you, it's important to us.

BILLING OFF ROAD SHOW

IN ASSOCIATION WITH LAND ROVER MONTHLY

27TH-28TH JUNE 2020

THE REAL BILLING OFF ROAD SHOW - HOME OF THE LANDROVER WORLD RECORD



AN ACTION PACKED WEEKEND

THE SHOW WITH THE 2 OFF ROAD COURSES, PLUS MUCH, MUCH MORE…

All enquiries email: sarah@thebillingoffroadexperience.co.uk
or call 01604 890271. Northamptonshire NN7 1AL.

www.thebillingoffroadexperience.co.uk

LAND ROVER CLUBS:
Book a free stand and receive 4 staff passes and half price advance and on the day ticket prices for all your members.

the GREAT BRITISH LAND ROVER SHOW

Newark Showground | 19th April

HEADLINE SPONSOR BFGoodrich Tires www.bfgoodrich.co.uk

INDOOR AND OUTDOOR EXHIBITORS

HALF-PRICE TICKETS IN ADVANCE!

OFF-ROAD ADVENTURE & OUTDOOR LEISURE ZONE

- Drive your vehicle round our off road course with AWDC
- Land Rover only parking areas

+ further features to be announced…

#GBLRS2020





THE SHOW SEASON STARTER THAT'S GUARANTEED NOT TO BE RAINED OFF

Newark Showground, Lincoln Road, Winthorpe, Newark, Nottinghamshire, NG24 2NY



All the best Land Rover kit, parts and merchandise.
Special show offers and exclusive deals.
Find our exhibitor list online at

www.greatbritishlrshow.com

Join our Facebook page for all the latest news about the show
www.facebook.com/gblandrovershow

Great British Land Rover Show
19th April 2020, 10am to 4pm

HALF-PRICE TICKETS IN ADVANCE!
£7.50 in advance, £15 on the door. Under 14s go free

OFF-ROAD COURSE TICKETS
£10 in advance, £15 on the day (limited availability)
See website for more details and to buy tickets!

Order online or call
01283 553243

sponsored by TerrafirMa Serious 4x4 Accessories
PADDOCK
ALL WHEEL DRIVE CLUB
In association with THE LANDY

WHAT'S ON

March 6 - 8

Welsh Xtrem, Challenge Event
Lanelli, Wales
thewelshxtrem.co.uk

March 7

Four Wheel Drive Club of N. Ireland, RTV Trial
Catcairn, Belfast
4wdni.co.uk

UK Landrover Events, Eden District 4x4 Tour
Cumbria
uklandroverevents.com

March 7 - 8

North East Rover Owners Club, CCV/RTV Trial
Penrith
nero.org.uk

Off Road Adventure Travel, Wiltshire 4x4 Explorer Tour
Wiltshire
offroadadventuretravel.com

March 7 - 26

Morocco — Protrax Overland Adventure, Desert and Mountain Tour
Morocco
protraxoverlandadventures.co.uk

March 8

All Wheel Drive Club, Comp Safari Round 1
Walters Arena, South Wales
awdc.co.uk

Hants & Berks Land Rover Owners Club, RTV Trial
Brick Kiln Farm, Hampshire
hbro.co.uk

Lincolnshire Land Rover Club, RTV and Ladies Trial
Manton, Lincolnshire
llrc.co.uk

Northern Ireland LRC, Self Assessment Event
Wightmans
landrover-club.com

Pennine Land Rover Club, RTV/CCV trial
Catlow, Lancashire
penninelandrover.co.uk

Scottish Land Rover Club, Time Trial
TBC
slroc.co.uk

Essex Rochford and District 4x4, Pay & Play Day
Canewdon, Essex
4x4er.co.uk

Parkwood Off Road Centre, Pay & Play Day
Tong, Bradford
parkwood4x4.com

4x4 Without a Club, Pay & Play Day
Harbour Hill, Aldermaston
4x4-withoutaclub.co.uk

UK Landrover Events, Lake District 4x4 Tour
Cumbria
uklandroverevents.com

March 9 - 13

Ardent Off Road, UK Coast to Coast
Cumbria / Yorkshire
ardentoffroad.com

March 14

Peak & Dukeries LRC, RTV/CCV and Tyro Trial
Norwood Lodge
panddlrc.co.uk

Solent & District Land Rover Club, Greenlanes
TBC
sadlrc.co.uk

Atlas Overland Adventure Tours, Wessex Wander
Salisbury
atlasoverland.com

France - Battlefields by 4x4, Calais Taster 4x4 Tour
Calais
battlefieldsby4x4.com

Trails & Tracks, Relaxed & Scenic Tour Durham Rambler
Durham
trailsandtracks.co.uk

March 14 - 15

Essex Land Rover Club, RTV / CCV Trial
Sudbury
elrc.info

Four Wheel Drive Club of N. Ireland, Comp Safari
Magheramourne, Larne
4wdni.co.uk

Southern Rover Owners Club, Tyro & RTV Trial
TBC
sroc.co.uk

ARDVentures 4x4, Moors & Dales Weekend
North Yorkshire
ardventures.co.uk

March 14 - 16

4x4 Adventures Ltd, Drive Round Weekend
Bampton, Devon
4x4adventures.co.uk

March 15

All Wheel Drive Club, Trial
Corwen
awdc.co.uk

Cornwall and Devon LRC, Comp Safari
Redruth, Cornwall
cdlrc.com

Dorset Land Rover Club, RTV Trial
Bransgore
dorsetrover.co.uk

Midland Rover Owners Club, CCV Trial
TBC
mroc.co.uk

NLRC, RTV/CCV Trial
Pentney, Norfolk
brecklandlrc.com

North West 4x4 Club, Trial
Northern Ireland
facebook.com/northwest4x4

Red Rose Land Rover Club, RTV Trial
Hambledon Hill, Burnley
landroverclub.co.uk

Scottish Land Rover Club, Tyro and RTV Trial



March 14 - 15

Yorkshire Moors & Dales Weekend

ARDVentures 4x4 are running a Yorkshire Moors and Dales Weekend on March 14 and 15. Starting with breakfast in Pickering the tour will head out across the Yorkshire Moors crossing rivers and a diverse range of lanes travelling around 50 or 60 miles before an overnight stop. Next morning after breakfast you will head off to the Yorkshire Dales and cross some of the most famous routes before a finish at around 4.00 pm. This tour is not for soft-roaders and you will need a well-prepared 4x4 with all-terrain tyres. Full details of this and other tours can be found on the company's website.
ardventures.co.uk



March 15

4x4 Safari

Kielder 4x4 Safari is an organisation that exists to raise money for the Northumberland National Park Mountain Rescue Team. The 4x4 Safari is a day of guided trails in the heart of the Kielder and Wark Forests, driving a variety of tracks. Routes will vary to ensure the long term sustainability of the events and are dependent on weather, harvesting and conservation issues. All vehicles must be road legal and in good condition. Details of this event which takes place on Sunday March 15 and other 4x4 Safaris along with booking forms can be found on the organisation's website.
kielder4x4safari.co.uk



March 29

Defender Day

This year's Defender Day at Pentillie Castle in Saltash, Cornwall, takes place on Sunday, March 29, and will again celebrate the iconic Defender embracing old, new and modified vehicles. Highlights include a 6 km, off-road course and Toylander display, as well as local motor and country trade stands and talks from off-road adventurers. There will also be children's activities and food and drink, making it a great family day out. Full details can be found on the event's website and Facebook page.
pentillie.co.uk



March 28 - 29

Comp Safari Shakedown

The Staffordshire & Shropshire Land Rover Club is running a Comp Safari Shakedown at the Sweet Lamb Complex in mid Wales on March 28 and 29. The Shakedown is a two-day Comp Safari on the famous Sweet Lamb stages and is an open event to all UK motorsport clubs. There will be three runs on Saturday and seven runs on Sunday — both starting proceedings at 10.00 am. Committed marshals are required for the weekend, with free camping being offered to marshals and competitors. Details, regulations and an entry list can be found on the event's website.
saslrc.co.uk



TBC
slroc.co.uk

■ **Torbay 4x4 Club, Trial**
Chudleigh, Devon
torbay4x4club.co.uk

■ **Woolbridge Motor Club, 4x4 and SUV Trial**
Simons Quarry,
woolbridge.co.uk

■ **Wye & Welsh Land Rover Club, RTV/CCV Trail**
Taffs Wells, Cardiff
wwlrc.co.uk

■ **Kielder 4x4 Safari**
Kielder and Walk Forest, Northumberland
kielder4x4safari.co.uk

■ **4x4 Adventures Ltd, Drive Round Day**
Bampton, Devon
4x4adventures.co.uk

March 20

■ **UK Landrover Events, Northumberland 4x4 Tour**
Northumberland
uklandroverevents.com

March 20 - 26

■ **UAE – FIA World Cup Cross Country Rallies, Abu Dhabi Desert Challenge**
Rub al Khali, Abu Dhabi
abudhabidesertchallenge.com

March 20 - 27

■ **Algeria – Tuareg Rallye, Rally Raid**
Bechar
tuareg-rallye.com

March 21

■ **UK Landrover Events, Tynedale 4x4 Tour**
Northumberland
uklandroverevents.com

■ **4x4 Adventures Ltd, David Bowyers Social Morning and 4x4 driving**
Credition, Devon
4x4adventures.co.uk

March 21 - 22

■ **Trails & Tracks, Grand Tour Moors and Dales**
Yorkshire
trailsandtracks.co.uk

■ **Australia – Ballarat District 4WD Club, Try 4x4 Day**
Smythesdale, Victoria
ballarat4wdclub.org.au

March 21 - 27

■ **Spain / Morocco – Santana Trophy, Rally Raid for Santana and Series Land Rovers**
Almeria, Spain
santanatrophy.com

March 22

■ **All Wheel Drive Club, Trial**
Walters Arena, South Wales
awdc.co.uk

■ **Leicestershire & Rutland LRC, CCV Trial**
Eaton Lodge, Melton Mowbray
lrlrc.co.uk

■ **Northern Off Road Club, Comp Safari**
Wickenby, Lincolnshire
norc.org.uk

■ **Northern Ireland LRC, Forest Drive**
Altmore Forest
landrover-club.com

■ **Northern Off Road Club, Comp Safari**
Wickenby, Lincolnshire
norc.org.uk

March 26 - 27

■ **UK Landrover Events, Two-day Lodge 4x4 Tour**
Cumbria/Yorkshire
uklandroverevents.com

March 27 - 28

■ **Australia — Kapunda Farm 4x4 Outdoor Expo**
Kapunda, SA
kapundafarmfair.com

March 27 - 29

■ **4x4 Adventures Ltd, David Bowyers Camping Off-road Weekend**
Credition, Devon
4x4adventures.co.uk

■ **Restoration and Classic Car Show**

WHAT'S ON

NEC Birmingham
necclassicmotorshow.com
■ **Australia – National 4x4 Outdoors Show**
Brisbane Showground, Brisbane
4x4show.com.au

March 28

■ **Trails & Tracks, Relaxed and Scenic Tour Hadrian's Wall**
Northumberland
trailsandtracks.co.uk

March 28 - 29

■ **Peak & Dukeries LRC, RTV and Tyro Trial, Comp Safari**
Newton Lodge, Derby
panddlrc.co.uk
■ **Staffordshire & Shropshire LRC, Comp Safari Shakedown**
Sweet Lamb Complex, mid Wales
saslrc.co.uk
■ **The Fast Show**
Santa Pod Raceway, Bedford
thefastshow.co.uk

March 28 - April 3

■ **Australia – Variety SA 4WD Adventure**
Kulgera, Northern Territory
variety.org.au/sa/event/4wd-adventure

March 29

■ **Defender Day**
Pentillie Castle, Saltash, Cornwall
pentillie.co.uk
■ **Anglian Rover Owners Club, RTV/Tyro and CCV Trial**
Whaddon, Milton Keynes
arocoffroad.co.uk
■ **Beds, Herts and Cambs Land Rover Club, Trial**
Brickhill, Milton Keynes
bhclrc.org.uk
■ **Chiltern Vale Land Rover Club, RTV/CCV and Tyro Trial**
Whaddon
cvlrc.co.uk
■ **Cornwall and Devon LRC, RTV Trial**
Okehampton, Devon
cdlrc.com
■ **Essex Land Rover Club, Greenlaning**
TBC
elrc.info
■ **Lincolnshire Land Rover Club, CCV Trial**
Scopwick, Lincolnshire
llrc.co.uk
■ **Scottish Land Rover Club, Who Dares Wins Event**
TBC
slroc.co.uk
■ **UK Landrover Events, Dales & Eden 4x4 Tour**
Yorkshire
uklandroverevents.com

March 29 - 30

■ **Compass Adventure, Yorkshire to The Lakes Explorer Tour**
Yorkshire
compassadventures.co.uk

March 30 - April 13

■ **Morocco — Active 4x4 Adventures, Morocco Adventure Tour**
Maghreb
active4x4adventures.com

April 3 - 5

■ **France — Battlefields by 4x4, Somme 4x4 Tour**
Albert
battlefieldsby4x4.com
■ **4x4 Adventures Ltd, Drive Round Weekend**
Bampton, Devon
4x4adventures.co.uk

April 3 - 16

■ **Morocco - ARDVentures Overland Adventure, Morocco Trip**
Morocco
ardventures.co.uk

April 4

■ **Northern Ireland LRC, Self-assessment Event**
Catcairn
landrover-club.com
■ **Scottish Land Rover Club, CCV Trial**
TBC
slroc.co.uk

April 4 - 5

■ **BXCC Comp Safari Championship Round 1**
TBC
thats-motorsport.com
■ **North East Rover Owners Club, CCV/RTV Trial**
Rothbury
nero.org.uk
■ **Trails & Tracks, Grand Tour Cumbria, Edan Valley and Dales**
Ambleside
trailsandtracks.co.uk
■ **Off Road Adventure Travel, Wild Wales 4x4 Explorer Tour**
Wales
offroadadventuretravel.com

April 4 - 10

■ **Serbia – Rustika Experditions, Homolje Gold Rush**
Pljevlja, Montenagro
rustikatravel.com
■ **Morocco - Lost World Adventures Ltd, Moroccan Explore Scouting Trip**
Morocco
lost-world-adventures.com

April 4 - 16

■ **Morocco — Atlas Overland Adventure Tours, Morocco Classic**
Fes, Morocco
atlasoverland.com

April 5

■ **All Wheel Drive Club, Comp Safari Round 2**
Ebbw Vale, South Wales
awdc.co.uk
■ **Cornwall and Devon LRC, CCV Trial**
Saltash
cdlrc.com
■ **Four Wheel Drive Club of N. Ireland, Trial**
Leck, Omagh
4wdni.co.uk
■ **Hants & Berks Land Rover Owners Club, RTV Trial**
Aldermaston, Berkshire
hbro.co.uk
■ **Lincolnshire Land Rover Club, RTV and Ladies Trial**
Wickeny Airfield, Market Rasen
llrc.co.uk
■ **North West 4x4 Club, Trial**
Northern Ireland
facebook.com/northwest4x4
■ **Scottish Green Land Club, Off Road Training Day**
Bathgate, West Lothian
scotgrc.co.uk
■ **Solent & District Land Rover Club, Greenlanes**
TBC
sadlrc.co.uk
■ **Southern Counties Off Road Club, Trial**
Aldermaston, Berkshire
scor4x4.co.uk
■ **Parkwood Off Road Centre, Pay & Play Day**
Tong, Bradford
parkwood4x4.com
■ **Piccadilly Wood 4x4, Pay & Play Day**
Bolney, West Sussex
piccadillywood4x4.co.uk
■ **4x4 Adventures Ltd, Drive Round Day**
Bampton, Devon
4x4adventures.co.uk
■ **Newbury 4x4 & Vintage Spares Day**
Newbury Showground
4x4sparesday.co.uk
■ **Normous Newark Autojumble**
Newark Showground
newarkautojumble.co.uk

April 7 - 8

■ **One Life Adventure Travel, Yorkshire Explorer**
Yorkshire
onelifeadventure.co.uk

April 7 - 17

■ **Spain — Off Road Adventure Travel, Galicia 4x4 Explorer Tour**
Galicia, Spain
offroadadventuretravel.com

April 10 - 12

■ **Australia — Mackay Offroad Challenge, 4x4 Challenge Event**
Cathu, Queensland
mackayoffroadchallenge.com
■ **Lincolnshire Land Rover Club, Easter Camping Weekend**
TBC
llrc.co.uk

April 10 - 13

■ **Australia — Land Rover Owners Club of Brisbane, Easter Adventure**
Glenreagh, NSQ
lrocbrisbane.org.au/events
■ **Essex Land Rover Club, RTV/CCV Trial, Easter Laning**
Bilsington
elrc.info
■ **Glossop 4x4 Group, Greenlane Trip**
TBC
glossop4x4group.co.uk
■ **Midland Rover Owners Club, Easter at Eastnor, RTV/CCV Trial**
Eastnor, Ledbury
mroc.co.uk
■ **Red Rose Land Rover Club, Easter Camping Weekend, Tyro Trial**
TBC
landroverclub.co.uk
facebook.com/RedRoseLandRoverClub/
■ **Southern Rover Owners Club, Easter JTV, CCV/RTV and Tyro Trial**
Broad Oak, Kent
sroc.co.uk

April 11 - 12

■ **Leicestershire & Rutland LRC, Tyro and RTV Trial**
Oxey Farm
lrlrc.co.uk

April 12

■ **Pennine Land Rover Club, RTV/CCV trial**
Whitworth, Burnley
penninelandrover.co.uk
■ **Essex Rochford and District 4x4, Pay & Play Day**
Canewdon, Essex
4x4er.co.uk
■ **4x4 Without a Club, Pay & Play Day**
Harbour Hill, Aldermaston
4x4-withoutaclub.co.uk
■ **UK Landrover Events, Peak District 4x4 Tour**
Derbyshire
uklandroverevents.com

April 12 - 13

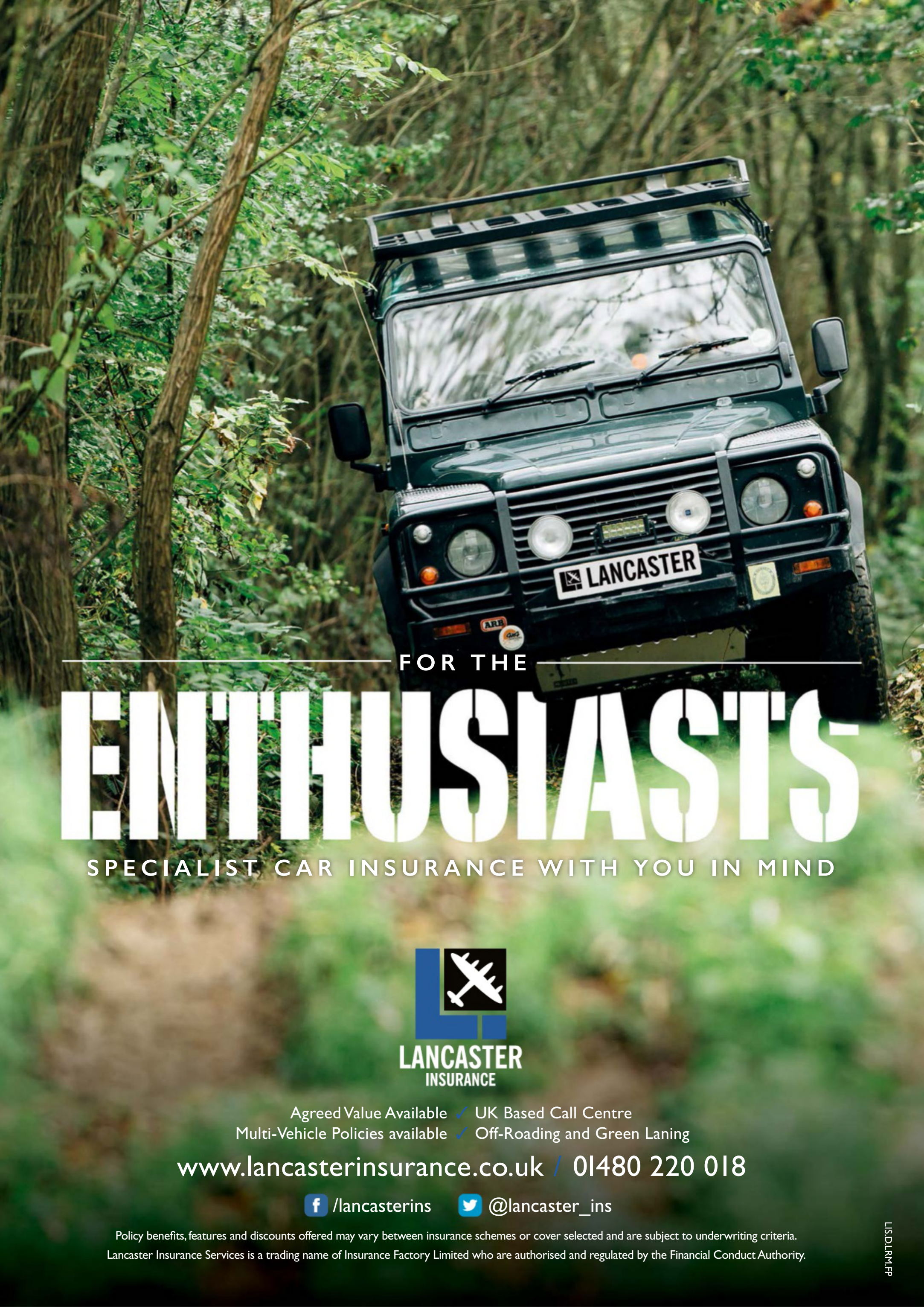
■ **All Wheel Drive Club, Trial Coney Green**
Stourport-on-Seven
awdc.co.uk

April 13

■ **UK Landrover Events, North Yorkshire Moors 4x4 Tour**
Yorkshire
uklandroverevents.com

April 14

■ **UK Landrover Events, Tyne & Wear 4x4 Tour**
Durham
uklandroverevents.com



FOR THE

ENTHUSIASTS

SPECIALIST CAR INSURANCE WITH YOU IN MIND

LANCASTER
INSURANCE

Agreed Value Available ✓ UK Based Call Centre
Multi-Vehicle Policies available ✓ Off-Roading and Green Laning

www.lancasterinsurance.co.uk / 01480 220 018

/lancasterins @lancaster_ins

Policy benefits, features and discounts offered may vary between insurance schemes or cover selected and are subject to underwriting criteria.
Lancaster Insurance Services is a trading name of Insurance Factory Limited who are authorised and regulated by the Financial Conduct Authority.

LIS.D.LRM.FP

Stop roving the land for insurance

Looking for a new defender? Find out how we can become ***your*** Classic Land Rover Insurance provider



The Carole Nash Difference

- UK & European breakdown and accident recovery, including Homestart - worth over £100 when compared to other providers
- Salvage Retention Rights
- Choose your own specialist repairer
- Agreed Value available

CALL NOW

0800 144 4678

carolenash.com/classic-car

CAROLE NASH
The care it deserves
Trustpilot

UK opening hours: Mon - Fri 8am - 8pm, Sat 9am - 5pm.

As with all insurances, terms and conditions apply. Carole Nash Insurance Consultants Ltd is authorised and regulated by the Financial Conduct Authority, firm reference no. 307243. Carole Nash is a trading style of Carole Nash Insurance Consultants Ltd, registered in England and Wales no. 2600841.

GET A LANDROVER INSURANCE QUOTE TODAY



GRAHAM SYKES 01395 255 100
THE SPECIALIST BROKER www.graham-sykes.co.uk

Graham Sykes Ltd. is authorized and regulated by the Financial Conduct Authority.
Calls may be monitored or recorded to help improve our service.

COME & GET DIRTY WITH ME



When it comes to 4x4 insurance,
Adrian Flux have got it covered.

Our 4x4 insurance policy benefits can include: Limited mileage discounts, off-road & green lane cover, modifications and much more.

Call us today for a free personalised quote
0800 085 5000 or visit **adrianflux.co.uk**

ADRIAN**FLUX**

Authorised and regulated
by the Financial Conduct Authority



PICTURES: ANDY WILSON

All the trimmings!

The Essex Land Rover Club Xmas Pud Shakedown is an annual event that takes place just after Christmas each year. Andy Wilson reports

THE Essex Land Rover Club Xmas Pud Shakedown is an annual event that takes place just after Christmas each year. Recently it has been held on the first Saturday after Christmas although it used to be December 27 regardless of which day it fell on. It is an open driver day for club members similar to a pay and play, only with the site marked out in a one-way route. It attracts the general members who don't usually take part in competitive events and gives them a chance to try some more challenging ground without the restriction of zealous grouping.

This year for the first time, we held it at the Snuggs Pit site near Sudbury, Suffolk. The site required a considerable amount of preparation due to the extreme activities that it sometimes hosts, which in the past has included winch challenges. It took about three hours setting out boundary fencing, barrier tape and signage to allow drivers a safe environment to drive without taking away any sensible challenges. We enlisted the help of the 4x4 Response part of the club to assist in any recovery. We also had several club members acting as observers to help direct any recovery to where it was required. I think everyone got stuck in one way or another with the site being very muddy.

In total we had 18 vehicles with drivers which also allowed them to have family and friends to drive as well. It also gives the club the chance to show new drivers how to use their vehicles, with the club's more experienced drivers on hand to give advice and encouragement. The club also ran a Tyro Trail on the day to give the junior members the chance to have a drive after Xmas.

There were a few vehicle casualties, which is not unexpected. Recovery teams were running a count to see who had recovered the most vehicles, and engage in some friendly banter as everyone got stuck in one muddy hole or another. But as ever the Land Rover community were eager to offer help.

Firstly, there was a broken ball joint on the rear axle A frame. Fortunately the driver was local and someone had a trailer on site, so help was forthcoming to get him home. There was a blown head gasket which occurred towards the end of the day, and a leaking power steering fluid pipe at the last minute. Thanks to all those who offered their services and equipment. The site changed considerably during the day, some areas





If you come out of the woods today, you're sure of a big surprise!



Out of the 18 vehicles that took part there was a lot of variation

became easier to drive, whilst others became more impossible.

The big challenge was the long moderate climb out of the central bowl. This had started as a muddy slope and turned into a sandy slope as the tyres cut through the top soil to the sand layer below. It made for an interesting spectacle to see who could conquer it and what technique to use. The most impressive was a Freelander 2, which drove up it as if it wasn't there.

The annual Xmas Pud Shakedown is a welcome chance for members to socialise and the club welcomed some new faces as well some more familiar ones this year. There was a lot of chat about Land Rovers and life in general, and as a result everyone was in a good mood, resulting in a laid back relaxed atmosphere – a fitting way to end 2019.

Essex Land Rover Club

THE Essex Land Rover Club was formed back in 1983 and is still very much an active club with the aim of promoting events for Land Rovers and to encourage the use of these vehicles and their equipment for both competitive, practical and leisure purposes.

The club hosts competitive and greenlaning events and caters for all Land Rover enthusiasts in and around the Essex area. Along with the various competitive gatherings such as Tyro, RTV and CCV Trials, the club has an active group of volunteers who offer their vehicles in times of bad weather as part of the Essex 4x4 Response Rover Rescue.

The club is also active in supporting various charity events that require a 4x4 capacity.

The club produces a bimonthly newsletter called Essex Exploits, which along with the club's website and Facebook pages together with its monthly Pub Meet keeps members informed of events and news.

To find out more check the club's website.

elrc.info

All about Europe

We may not be European any more, but Dave has plenty of Land Rover memories of his travels around our neighbouring nations



G-reg V8 Discovery at The Burren, Co Clare, Ireland

I am writing this as a former European. It's February and the UK has finally left the European Union. I suppose I ought to be either excited or disappointed, but I'm neither. Life goes on.

I expect I felt much the same way on the day we joined. I say 'expect' because although I clearly recall what I was doing on January 1, 1973, becoming a European wasn't something I remember. Maybe it's because that day happened to be my first day on the job as a newspaper reporter. Although I'd been signed up as an indentured trainee the previous summer, I had spent the rest of 1972 on block release at college. January 1 was my first day behind the desk as a proper reporter. Coincidentally, it was the last time I would work on January 1 — New Year's Day became a Bank Holiday the following year.

The newspaper I first plied my trade with was Angling Times. The hot topic on the day we joined the Common Market (as it was commonly known then) was sea anglers' fears that foreign trawlers could now mop up all our fish stocks. In retrospect, their worries were justified.

Of course, I had much bigger concerns. I was two days away from my 17th birthday, when I would be legally allowed to ride my newly-purchased Honda CD175 motorbike, after an embarrassing year spent riding a Puch Maxi moped. I would also be able to start driving lessons and save up for a car. Now that I was back from college, I'd be able to see more of my girlfriend, as well as spend more time with my mates. Who cared about Europe — or any other grown-up issues, come to that?

Back in 1973, inflation was in double figures and the whole country regularly ground to a halt because of industrial disputes. The future should have looked bleak for all sorts of reasons, but to a teenager politics was just background noise. We were much too busy having fun.

But I did eventually grow up and appreciate Europe. And I certainly enjoyed exploring it by Land Rover. My love affair with the marque began in 1995 with the loan of a shiny new 300Tdi Discovery from Land Rover's press fleet, which I promptly took on a month-long tour of the British Isles, including Wales, Scotland, Northern Ireland and the Republic of Ireland. And England, of course.

M259 KAC was the first Land Rover I ever got to write about. The day after I had to give



DAVE PHILLIPS
CONTRIBUTOR

DISCOVERY 1 300Tdi

YEAR: 1996 **MILEAGE:** 170,000
MPG: 25 **POWER:** 111 bhp
TORQUE 195 lb-ft

DEFENDER NINETY

YEAR: 1984 **MILEAGE:** 168,000
MPG: 30 **POWER:** 111 bhp
TORQUE 195 lb-ft



Dave's Honda 175 outside Angling Times office



1995 Discovery in ferry queue at Holyhead



Roger C inspects Range Rover wreck, Spain



Madness in Portugal, driving down a river



Would you drive across this Portugese bridge?

it back I went shopping for a Land Rover of my own. I settled upon a Range Rover Classic V8. I had become an enthusiast and there was no cure.

Less than two years later I became a Land Rover journalist and got plenty of excuses to drive my favourite vehicles in Europe.

How the memories come flooding back. I remember exploring the West of Ireland in a very early V8 Discovery and finding a green road across the astonishing limestone pavement known as The Burren in County Clare, just as the sun was starting to set over the wild Atlantic coast and the soaring 700 ft Cliffs of Moher.

In 2001 I took delivery of a brand-new Td5 Defender 90 and decided to run it in by joining an overland humanitarian mission to Bosnia via France, Germany, Austria, Slovenia and Croatia, before returning on a more northerly route that took in Luxembourg and Belgium. That put more than 2000 miles on the clock.

The European nation I visited most of all was Portugal — Britain's best friend (we've been allies since 1386) and a nation that adores Land Rovers. They are everywhere. The Portuguese are also the biggest fans of the legendary Camel Trophy and staged recreations at every opportunity among the mountains and forests that cover much of this wonderful country.

Portugal's near-neighbour, Spain, was also a favourite. I was there for the launch of the Range Rover Sport in 2003 and back again a year or so later on a recce in the mountains inland from the Costa Blanca. Land Rover legend Roger Crathorne took me to an off-road paradise just a few miles inland from the fleshpots of Benidorm, where we drove a pair of ex-G4 Defender 110s down a dried-up river bed where no vehicle had ever travelled before — or so we thought. About half a mile downstream from the nearest access point we came across the twisted wreck of a Range Rover.

Local enquiries revealed it had been washed away in severe floods a few years earlier and had been lost without a trace, until we found it. A few months later, Roger and I mounted a rescue mission, with a hand-picked team, in which we succeeded in removing the wreck from the pristine environment. What an adventure that was!

Of course I will be back to Europe. When this 'transition period' ends at the end of the year, it may require a bit more paperwork and bureaucracy, but it's worth the effort. I will only be following a family tradition, after all.

Last year my elder brother, Ray, after spending all of his adult life in and around Wisbech, Cambridgeshire, upped sticks and moved to Gozo, a small, sun-kissed island off the coast of Malta. Ray, who is 14 years older than me, decided that if he had to retire, he might as well do so somewhere warm. Since emigrating, he has been bombarding my inbox with snaps of Land Rovers taken on his mobile phone.

By coincidence, yesterday he called me to tell me he had heard of a local man who owned a 1945 Land Rover. It was, he was told, "the oldest Land Rover in the world". He has promised to investigate.

I have to admit I'm rather excited. For more than 20 years I've heard rumours that one of the original centre-steer prototypes was supposed to have ended up in Gozo. My colleague Mark Dixon even considered mounting an expedition to Gozo a few years ago, on the strength of those rumours, in an attempt to find it.

Of course, the Land Rover my brother has heard about isn't a 1945 model — the centre-steer wasn't built until 1947 — but the locals could have simply got the date wrong. I will keep you posted.

LRM'S FLEET

Every month, LRM staff and contributors share their real-life experiences with the Land Rovers they own...



PATRICK CRUYWAGEN
EDITOR
1998 Defender 110 2.8



TREVOR CUTHBERT
CONTRIBUTOR
1984 Land Rover 90 Mazda 3.5 Tdi automatic soft top (rebuild project)
1990 Land Rover One Ten LHD V8 soft top
1994 Defender 130 Tipper 300Tdi
1998 Defender 90 Station Wagon 2.8i BMW six-clyinder petrol
2002 Discovery 2 Td5 Adventurer
2004 Defender 90 Td5 hard top



DAVE BARKER
CONTRIBUTOR
Discovery 4, Freelander 2 XS
Defender 90, Series I



ED EVANS
TECHNICAL EDITOR
1976 Series III 88 soft top
1989 Ninety Station Wagon
1998 Discovery 300Tdi
2000 Freelander 1 L-series
2000 Defender 110 Td5
2006 Range Rover Sport TDV6



Never-ending story



A chassis cab built around the Mazda 3.5 engine

True to the adage... a Land Rover is never finished

HOW many times can you build a Land Rover? This may seem like a strange question and the answer should probably be once, but with the old adage that a Land Rover is never finished – there is always some modification or improvement you want to do. As I work on building up a chassis cab for my latest Land Rover Tipper, the question came into my mind, because I have been around quite a few corners with this one!

It all started as a project for LRM around a decade ago, where I built up a 130 Double Cab HCPU, using a brand-new galvanised chassis manufactured by Richards Chassis Ltd and a Mazda 3.5 diesel engine as the basis for the project. The Mazda SL35Ti is an engine that was used to convert many classic Range Rovers from petrol V8 to diesel power by a company called M&D Engineering, back in the 1990s. The example that I got hold of came in a very rusty Range Rover body shell but had only covered 29,000 miles in that vehicle from new and was in excellent condition with a ZF4HP22 transmission. The 130 project was completed for the LRM technical series and duly parked in the barn and forgotten about, as we had quickly moved on to the next project.

Some eight years later my American friend, Colby Phillips of Savannah, Georgia, wanted to purchase the 130 Double Cab – which had been named 'Pilgrim' for the magazine features – and ship her to the USA. However, the USA import laws would not allow a Land Rover on a new galvanised chassis to come into the country, nor a non-factory engine and drivetrain. So Pilgrim was duly transferred onto an original factory chassis with a 200Tdi engine and LT77 gearbox, leaving me with the chassis, Mazda engine and various other useful parts. I could say that I built Pilgrim twice, perhaps. Colby has been driving Pilgrim for one year and loves the Land Rover, although I must get a replacement pair of sun visors posted over to him – the originals were stolen during shipping!

I calculated that the parts I had left over would actually cost me almost £7000 if I went to replace them — although I would probably never be able to realise that much money for them. It would be much better to use them for myself and enjoy their true value. That being said, I did not need to own a 130 Double Cab and I opted to use the engine, drivetrain and other residual parts to build a 90 off-roader. I even got as far as building up a rolling chassis last winter, in a couple of days of mad activity.

The Mazda engine is too heavy for an off-roader really, and is much better suited to a work truck; my enthusiasm drained for the 90 project, even though the engine was in place. Then a man visited from Co Galway and offered me a very generous sum for my 130 Tipper, which I initially refused. The Galway man persisted but gave me time to think it over and I soon realised something — the 130 galvanised chassis from Pilgrim remained unsold (the dude that didn't turn up to pay for it did me a favour!) and I had virtually everything I needed to build a chassis cab based around the fabulous Mazda engine. I therefore took the good money for my Tipper and embarked on the build up of a chassis cab for a replacement Tipper.

How many times? There was the original Pilgrim build, followed by the re-chassis and re-power. Then the ill-fated 90 rolling chassis and now back to 130 chassis cab. I'm excited.



TREVOR CUTHBERT
CONTRIBUTOR

LAND ROVER: 130 CHASSIS CAB PROJECT

YEAR: 1987 **MILEAGE:** 29,000 miles
MPG: Not running yet **POWER:** 107 hp
TORQUE: 188 lb/ft



You got to question a man that has a crocodile skull!



LRM logo and stickers prevent prying eyes



The Frontrunner drawer system is rated to carry 150 kg

Top drawer

Pat puts a Frontrunner drawer system to the test

ONE of my favourite things about owning a Defender 110 CSW is the fact that I can customise it according to my not-so-simple needs. Most of you would've recently read how Exmoor Trim transformed the interior with a new black carpet set, Elite Sports front seats (heated) and a black leather Loc Box. I now feel like a rock star or international rugby player when driving my Defender. I was not done with the interior however, and while getting Dinitrol treatment at South West Rustproofing, I asked them to also install my Front Runner drawer system.

Despite the fact that I did not install the system myself I did read the instructions and was aware that they had to drill a few holes to secure the drawer to the Land Rover. It's not a train smash, it's a Defender.

The reason for acquiring this system is that I hate it when the back of my Defender is full of stuff. I want to hide it all in an orderly fashion. Thanks to the LRM logo and stickers on my back windows no one can really see into the back of my Defender. If overlanding through some of the world's poorer countries, people will break into your Defender if they even have a whiff of valuables lying about. So the drawer system helps eliminate that.

The whole system weighs 60 kg and it is rated to carry 150 kg. Unlike some other systems and because of the shape of the Defender 110 interior, it is one drawer only that is one metre long, 65 cm wide and 21.5 cm high. Aluminium has been used to make the sub frame while the rest is black powder-coated steel. The deck is made from carpet-covered plywood. In the future I might attach some hoops on the deck and use some tie-downs to secure my fridge on it. The single drawer is not as wide as the floor so one is able to slide gear in beside the drawer.

The whole system cost £904.02 (at time of writing) which includes shipping and VAT. The only thing you have to do is to install it and enjoy it.

I've been using the drawer system for about six months now and I must say I love it. The height can be a little restrictive but I have a roof rack or else I just place big or extra stuff on top of the drawers. It's a durable system that should just about last as long as my Defender. I've never heard of someone complaining about their Front Runner drawer system, put it that way.

Incredibly, this drawer is exactly the same as the one that fits into the little Suzuki Jimny. I suppose if I did away with the second row of seats I could've gone with a longer and bigger system, but I am more than happy with what I got – plus I often use the bench seat.

So, what do I keep in my drawer? Obviously it changes and depends on where I am going, and the time of the year. Generally, I always have the following in it: tent, sleeping bag, jacket, change of clothes, camping stove, blanket, real crocodile skull, radio, gas, WD40, tool set, duct tape, emergency rations, jump start kit, tea and coffee. If you see my Defender at the Billing Off Road Show and want to take a look at the system please do come and say hello.

• *Frontrunner also make drawer systems for the very latest Land Rovers and other 4x4s. To find out more about what accessories they produce and sell see frontrunneroutfitters.com.*



PATRICK CRUYWAGEN
EDITOR

DEFENDER 110 2.8i

YEAR: 1999 **MILEAGE:** 257,000km **MPG:** 20
POWER: 193 bhp **TORQUE:** 206lb ft

LRM'S FLEET

Every month, LRM staff and contributors share their real-life experiences with the Land Rovers they own...



DAVE PHILLIPS
CONTRIBUTOR
1996 Discovery 300Tdi
1984 Ninety 300Tdi



MARK WILLIAMS
CONTRIBUTOR
2005 Freelander 1
TD4 HSE Station Wagon



STEVE MILLER
CONTRIBUTOR
2007 Discovery 3, 2004 facelift
Freelander 1 Td4 SE



TIM HAMMOND
CONTRIBUTOR
1991 Range Rover Classic 300Tdi
1987 Range Rover Classic 3.5 EFI V8
1986 Range Rover Classic 300Tdi
1984 Range Rover Classic 3.5 V8
1984 Range Rover Classic 3.5 V8
1982 Range Rover Classic 3.5 V8
1982 Range Rover Classic 3.5 V8
1989 Land Rover Discovery 200Tdi



ALISDAIR CUSICK
CONTRIBUTOR
1995 Range Rover Classic
1957 Series I

Vehicle Wiring Products

"We supply a comprehensive range of wiring products for repair, modification or complete rewire to your Land Rover"



Visit our website, phone or email for a free catalogue

www.vehicleproducts.co.uk

Tel : 0115 9305454 **email:** *sales@vehicleproducts.co.uk*
Vehicle Wiring Products 9 Buxton Court, Manners Ind Est, Ilkeston, Derbyshire DE7 8EF

Contour - Academy

Car body metalwork courses

- Practical hands-on training from time-served craftsman with generations of industry knowledge
- Three-day intensive courses, beginner to advanced skills

"An outstanding training package. delivered extremely competently by an expert in his field. An excellent mix of theory and practical hands-on-training. Help and advice readily given throughout and every question answered in an easily understood way. Well illustrated handouts provided along with all necessary materials and equipment. In sum, some of the best training I have undertaken in 36 years."

Paul Hudson (student)

EAL RECOGNISED PARTNER

APPROVED ASSESS-MENT CENTRE



01406 330504

www.contouracademy.com

MASAI 4X4 REPLACEMENT SEAT COVERS



**Many other designs are available*

We offer a range of replacement seat covers in many different designs for Defender TD5/200TDI/300TDI & PUMA TDCi

Available for:
- Front & Front Middle
- Second Row (60/40 & 1/1/1)
- Forward Facing 6 & 7
- Inward Facing

QR CODE SCAN ME

A FULL FITTING SERVICE IS AVAILABLE ON ALL OF OUR PRODUCTS

www.masai4x4.com /masai4x4

Masai 4x4 Defender Accessories
Unit 5B, Eastern Park, Eastern Avenue,
Lichfield, Staffordshire,WS13 7SY

E-mail: info@masai4x4.com
Telephone: 01543 254507

masai

NEED A WATERPROOF WINCH?
GET A TDS GOODWINCH!



Call Goodwinch. With over 31 years experience Goodwinch is the company you can trust!

DYNEEMA BOWROPE



Dyneema® Bowrope - available from stock in 5, 6, 8,10, 11,12 & 14 mm. Ready made ropes are complete with red safety hook or larger yellow competition hook and tubed thimble
10mm x 100' (30.5m) £189 + VAT
11mm x 100' (30.5m) £199 + VAT
Aluminium Hawse Fairleads £29 + VAT

Also available Green Budget Bowrope
10mm x 100' (30.5m) £129 + VAT
11mm x 90' (27.5m) £129 + VAT

BUMPER DEALS



Land Rover Defender Bumper
for TDS and most other winches
Non Air Con Special Price £189 + VAT
Air Con Special Price £199 + VAT
For other bumpers please phone for price.

TDS GOLDFISH WINCHES



TDS-9.5c Goldfish complete with wire rope, roller fairleads, and a heavy duty swingaway pulley block. 9,500 lbs. 173:1 ratio
Tremendous value at £499 + VAT

Upgrade to 10mm x 100' (30.5m) Dyneema® Bowrope and aluminium hawse in lieu of wire rope
£149 + VAT

Also available as a Commercial TDS-12.0c Goldfish complete with wire rope, roller fairleads, and a heavy duty swingaway pulley block. 12,000 lbs. Super value at £529 + VAT.

Upgrade to 11mm x 90' (27.5m) Dyneema® Bowrope and aluminium hawse in lieu of wire rope £149 + VAT

GOODWINCH commercial TDS-12 Goldfish Waterproof medium speed 254:1 ratio winches for vehicle recovery trucks, trailers and other heavy duty uses



TDS-9.5i Bridge Model Goldfish complete with wire rope, roller fairleads, and a heavy duty swingaway pulley block. 9,500 lbs.
£509 + VAT

Upgrade to 10mm x 100' (30.5m) Dyneema® Bowrope and aluminium hawse in lieu of wire rope
£149 + VAT

SPECIAL OFFER WINCH & DEFENDER BUMPER full system Deals

TDS-9.5c or TDS-9.5i bridge model, complete with wire rope, roller fairleads, swingaway pulley block, vehicle wiring kit including cut out switch and battery link, TDS Wireless Radio Remote, two swivel recovery eyes and shackles, and a standard Defender non air con Bumper.
All for £699 + VAT (air con plus £10 + VAT) (normally £786 + VAT)
with Dyneema® Bowrope and Ali Hawse £848 + VAT
We have special offers for Discovery 1 & 2 and Classic Range Rover

BOWMOTORS



Bowmotor replacement winch motors. Large brushes in brass holders, copper welded commutators, superb quality. In three sizes,
Bowmotor '1' 5.6 hp @ 4000 rpm and the longer
Bowmotor '2' 6.8 hp @ 5000 rpm & even longer
Bowmotor '2' Plus 8.0 hp @ 6000 rpm.
As used extensively in the winch challenge field.
Bowmotor '1' 175mm long 12v or 24v £169 + VAT
Bowmotor '2' 196mm long 12v or 24v £199 + VAT
Bowmotor '2' Plus 220mm long 12v £229 + VAT

PLEASE GO TO OUR WEBSITE OR GIVE US A CALL

Also stocked is our Turbo power controllers, Albrights & Bowright solenoids, TDS-Budget & Lodar Radio remotes, TDS Air Freespool kits and loads of winching accessories.

DB001/0617

GOODWINCH.COM

Goodwinch Limited
1 Oakleaf Way, Tree Beech Rural Enterprise Park,
Gunn, Barnstaple. Devon. England. EX32 7NZ

Tel: +44 (0)1363 82666 sales@goodwinch.com

WWW.GOODWINCH.COM

Step up in Style!

Discovery 4 Electric Deployable Side Steps





See them in action at **www.britpart.com/DA1512**



DA1512
Discovery 4

- Easy access to your Discovery 4
- Never available from Land Rover as an OE option.
- Smart design. Enhance the look of your Discovery 4.
- Tucked away when driving, prevents damage. Fixed steps susceptible to damage when driving off-road.
- Side steps automatically lower into place when a door is open and raise once door is shut.
- Safety cut-off should step encounter an object.
- Function to lower step with door shut - ideal for accessing the roof.
- Manufactured from aluminium - strong and light.

Part number is provided for identification purposes only and do not imply or indicate the identity of the manufacturer. E&OE. Products available from your local Britpart stockist.

BRITPART

The quality parts for Land Rovers

www.britpart.com

To find your nearest stockist
www.britpart.com/distributors

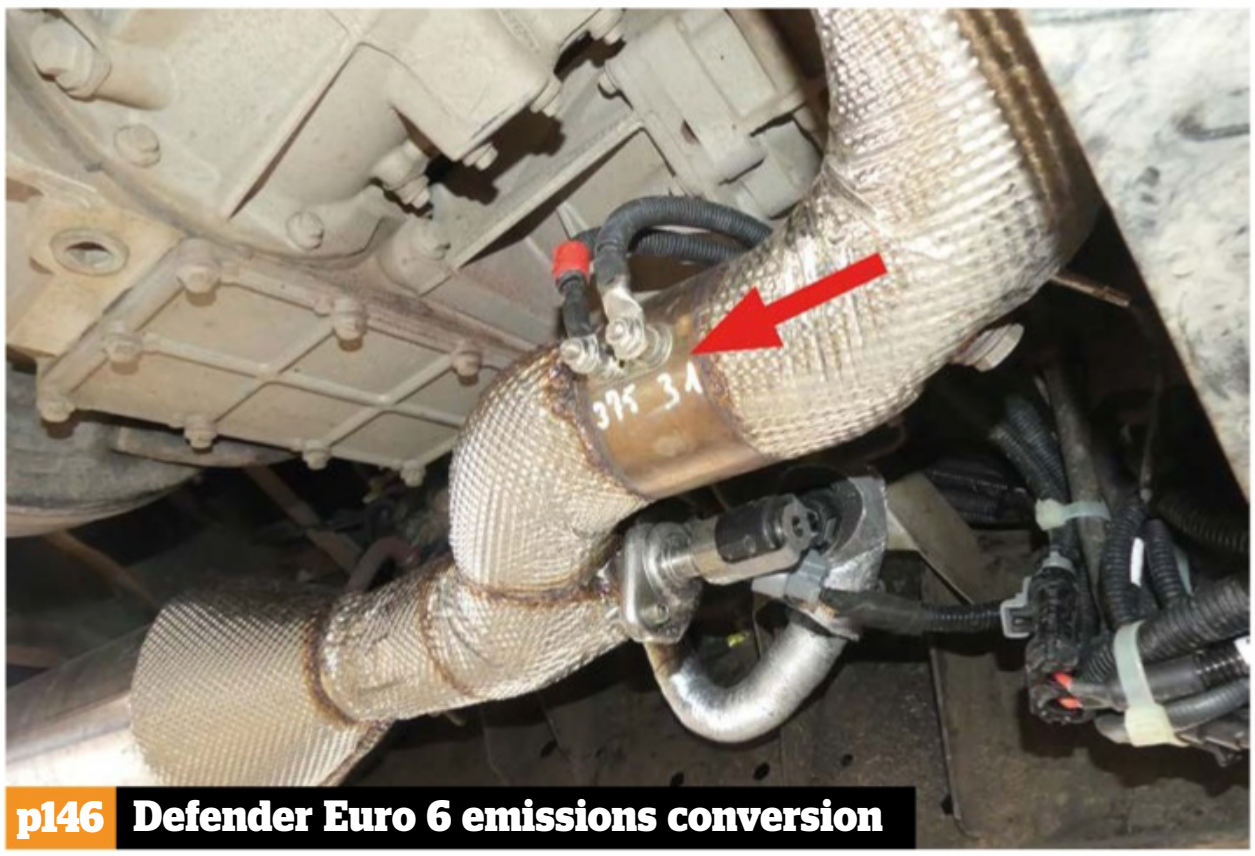
24 month Guarantee BRITPART



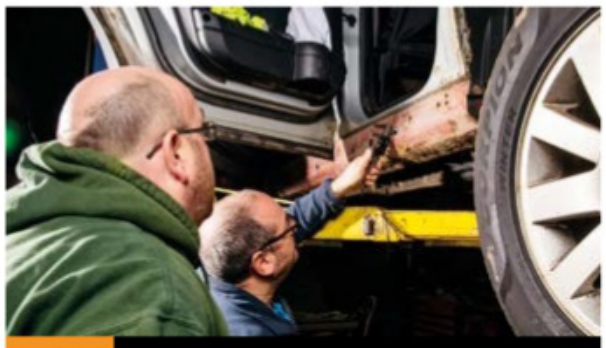
TECHNICAL EDITOR
ED EVANS
CONTACT: lrmtechnical@gmail.com

How to...

Projects, repairs, modifications and advice guide



p146 Defender Euro 6 emissions conversion



p134 D3 sill replacement



p140 Welding masks tested

Contents

128 Inspection & rebuilding
Check out part 2 of our Discovery Td5 head removal

134 Discovery 3 sill repair
With underfloor and sill rot to rival the Disco 1 here's how to sort it

142 Product test
Why you need an auto-darkening welding mask and which is best

146 Defender E6 conversion
Make your Defender TDCi Euro 6 compliant and emission zone friendly

WORK SAFELY

- Wear thick protective gloves when working with sharp edges, grinding, cutting and using an angle grinder
- Hold the angle grinder with two hands to control torque twist and kick-back
- Wear eye protection when grinding, cutting, wire brushing, sanding, releasing springs and clips, when opening fluid lines and working on overhead parts
- Wear a particle filter when removing rust and cleaning brake parts
- Wear steel toe-capped work shoes that will protect against falling objects and ensure better grip on slippery floors
- When welding, wear specialist welding protective gloves, clothing and mask, and ensure appropriate fire-fighting equipment is available close by
- Never work on a cooling system, nor remove the filler cap, until the engine and coolant are fully cooled; and then always remove the filler cap slowly in case of residual pressure

The right way – and the wrong way

THERE'S always plenty of discussion about the best tyres, wheels, suspension and ride height for off-roading. And with good reason, because terrain and driving style varies so much that there's considerable advantage in modifying the truck to match the conditions.

But it's still the case that any standard Land Rover will cope admirably with normal off-road routes — the tricks come into play when the terrain becomes extreme and there's a desire to test both the driver and the machine to the limits.

On the utility side of our vehicles, a Series I will get itself pretty much anywhere with a good driver. Likewise, a Freelander 1 will follow a Defender over any greenlane and the gnarliest of official tracks. And, if that sounds optimistic, take a look at the YouTube video 'Austin 8 introduction movie', filmed in 1939 as the Austin bounced and scrabbled its way around the Lake District. Watch it tackle off-road climbs such as the fabled Garburn Pass and Walna Scar on spindly wheels and tyres with not a suspension lift in sight. It was obviously filmed in dry conditions, and I wouldn't have given the old crate much chance in the wet. The driver is literally throwing the car around with all the speed and power he can muster — hardly the way to drive off-road in these more environmentally considerate days. But it's testimony to the strength of these old motors, and to what could be achieved without four-wheel drive and the associated off-road clobber.

Of course, the video doesn't show the film crew, nor the back-up service team and rescue/repair truck that was undoubtedly following. When we off-road the proper way, we need the traction to drive safely without ripping up the track. And that does call for the right tyres, tough suspension and underside clearance, a winch and the company of other Land Rovers to help get out of trouble. Anyone throwing an unprepared truck around like the guys in the Austin 8 are heading for the demise of their Land Rover, and of off-roading in general.

Ed Evans, Technical Editor

BRITPART www.britpart.com

Td5 OVERHEAT, PART TWO



Inspection and rebuilding

With the cause of the D2's overheat confirmed and fixed, Trevor guides us through rebuilding the engine with a new cylinder head

THE engine in this Td5 Discovery had given trouble-free motoring for over 240,000 miles, until it had begun to overheat and pressurise the cooling system. We decided to take the cylinder head off to investigate what had gone wrong, fix the problem and get the Discovery back into full service. Last month, in the first part of this two-part feature, we removed the cylinder head and saw, as expected, that the plastic dowels that help locate the head in position on the engine block had failed. The resulting head gasket leaks led to warping of the cylinder head – here, we fit the replacement head and build up the engine.



CONTRIBUTOR
TREVOR CUTHBERT

NEED TO KNOW

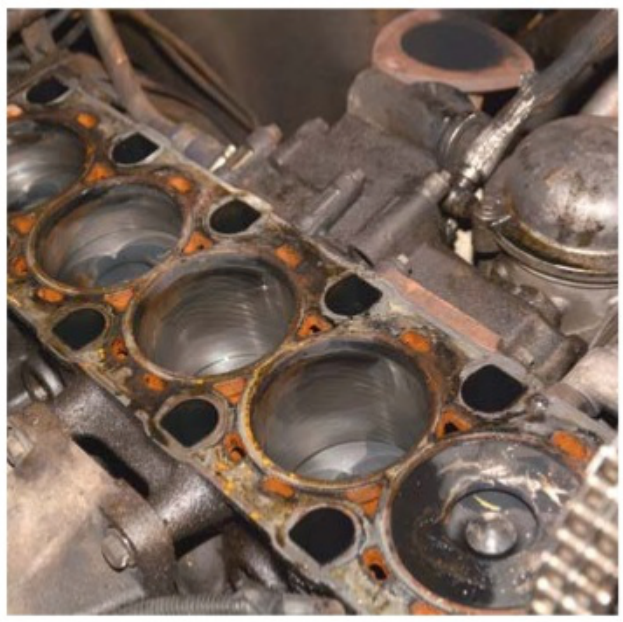
COST: £1332.50
TIME: 7 hours
DIFFICULTY:
MODELS: Defender 90, 110, 130 Discovery 2
TOOLS: General workshop tools, breaker bar, timing pin set, injector puller, torque wrench, angle gauge
PARTS & COSTS: Reconditioned Td5 cylinder head, £1050; Set of cylinder head bolts (ERR5384), £40; Set of four glow plugs (OEM), £16; Td5 head set (misc gaskets) (Britpart, DA2112), £43.50; Td5 head gasket (Britpart LVB000260), £25; Fuel pressure regulator (Britpart), £89; Extended manifold studs (Allisport), £69. All supplied by BLRC Ltd.
WORK SAFELY:
- Wear protective gloves
- Wear safety boots
- Ensure correct lifting techniques are employed in restricted engine bay

CONTACT: BLRC Ltd, Tel: 02897 511763, blrcvehiclespecialist.co.uk

www.britpart.com BRITPART

Assessing and preparing the engine block

THE primary objective at this stage of the project is to remove the old head gasket, remove all of the bonded-on pieces of gasket material and to clean off all carbon and other deposits from the mating surface of the engine block. When carrying out these operations, there are two vital aspects where caution must be exercised. The first is to ensure that none of the material is dropped into the oil channels or water channels in the engine block, as well as keeping debris out of the cylinders themselves. The second is to be sure not to scratch the mating surface of the engine block when scraping off the material. The material can be easily scored, and this type of damage would probably result in early failure of the new head gasket. We also need to check that the block is not warped – the mating surface needs to be perfectly flat in order to fit the new cylinder head successfully.



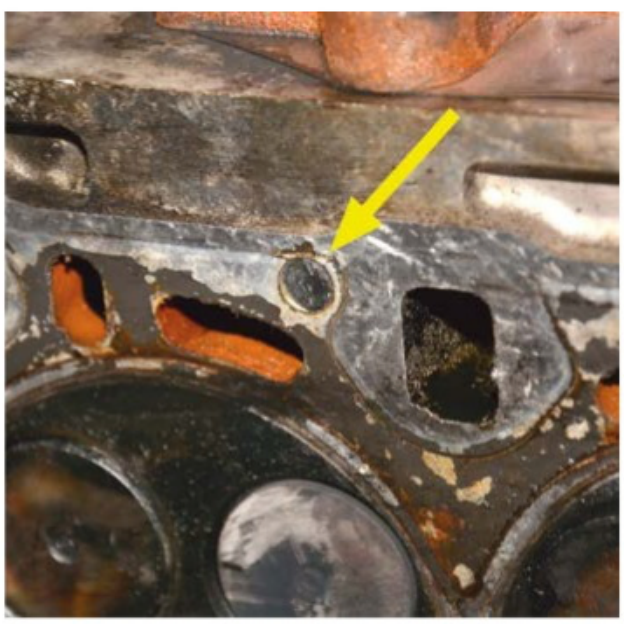
Detailed inspection

1 It's important to inspect the components before cleaning them. In this case, the coolant and gasket stains on the block give us an indication of what has gone wrong.



Honing marks still distinct

2 There are clear signs (right) that the head gasket had failed at number 3 cylinder, but the bores seem to be in excellent condition, which is great news.



Floating cylinder head

3 Both plastic locating dowels (arrowed) have broken down and sheared, meaning the cylinder head was no longer firmly aligned on the engine block, and could move slightly.



Something to gain purchase

4 To remove the remains of the rear dowel, a screw was turned in to it, to provide something that can be gripped to pull it out.



Cleanly out

5 By gripping the head of the screw with these self locking pliers, the plastic dowel was pulled from the engine block with a little wiggling and force.



Not so co-operative

6 The forward plastic dowel had deteriorated so much that a screw would not grip. So the dowel had to be prodded and dug out of the cylinder head.



More robust

7 Later Td5 engines had steel locating dowels for the cylinder head which do not fracture like the plastic ones tended to do, preventing movement of the head.



Hammered in gently

8 The new steel dowels are gently tapped into the engine block, being careful not to distort them or to cause any damage to the block face.



Take your time, clean it up

9 All remaining gasket material, corrosion and any other impurities now need to be removed from the mating surface of the engine block, without causing marks.



Is there distortion?

10 With the surface perfectly cleaned, the straight edge of a steel rule is used with a feeler gauge to check for warping or erosion damage to the engine block.



Touchy feely

11 The human finger, even through a nitrile glove, is sensitive enough to be the very best final detector for dirt or marks on the mating surface.

Fitting the new cylinder head

THE intention was to send the original cylinder head to O. D. Cars Ltd – a local engineering works that specialises in auto engine and cylinder head reconditioning – to have it pressure tested in order to detect any cracks or other issues. However, it was immediately apparent that the head was distorted and warped at the surface which mates with the engine block. Placing our steel rule along this surface, revealed gaps that we did not need our feeler gauge to detect. There was also some scoring evident, which was probably due to movement of the head, following the failure of the plastic dowels. The Td5 cylinder head cannot be re-skimmed successfully, so there was little choice but to fit a replacement head.

The refurbished cylinder head was supplied in a condition that was essentially ready to fit. The new valves, valve springs and cam shaft were already assembled in place and nothing was stopping us from setting the head straight onto the engine block. However, we decided to fit some of the additional ancillary components on the workbench, for a couple of reasons.

The engine bay on the Discovery 2 is quite restricted in certain areas, so it is easier to fit certain components while the access was unlimited, though without adding anything that would make lowering the cylinder head onto the engine block more difficult or impossible. The other reason for adding ancillaries, is that they can offer more things to grip onto when the heavy cylinder head is being man-handled.



Kit with everything needed

12 Refitting the cylinder head or fitting a new cylinder head not only requires a new (correct thickness) head gasket, but also many additional gaskets and seals.



Completes the prep

13 The new head gasket is fitted onto the engine block, using the steel dowels to accurately locate it, and we're now ready for the cylinder head.



Partially built up

14 The new cylinder head, supplied with new valves and valve springs is already assembled and ready to fit onto the engine block.



Add some handles

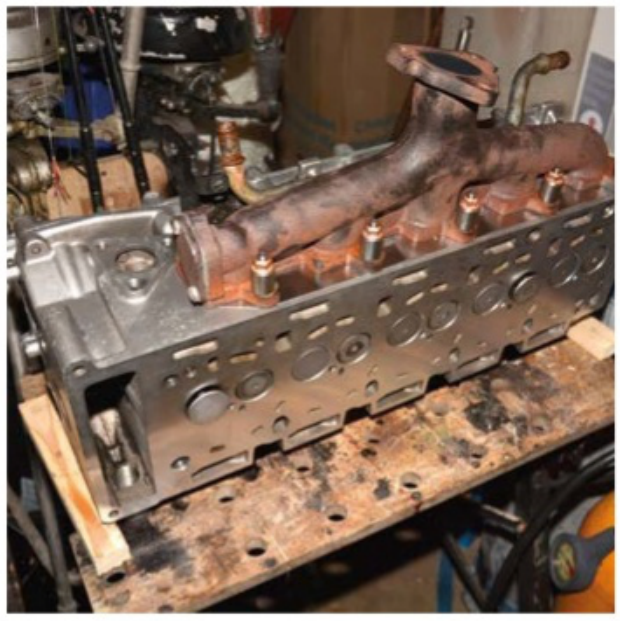
15 To have a better grip when fitting the new head, we fitted some of the ancillary components, such as this lifting lug, to help handle the heavy weight.

www.britpart.com BRITPART



Is it straight?

16 The Td5 exhaust manifold has a habit of warping with the extremes of heat, so a quick check with the steel rule gave us some reassurance.



Extended studs

17 The exhaust manifold was fitted to the head with a new gasket and Allisport extended stud kit – it's another item to grip when manoeuvring the head into place.



Taking the opportunity

18 New glow plugs were fitted to the cylinder head at this stage because it's a tricky job in the engine bay after the inlet manifold is in position.



And another

19 The fuel pressure regulator is another difficult component to replace in the engine bay, so it was a good time to fit a new one, particularly as the old one leaked



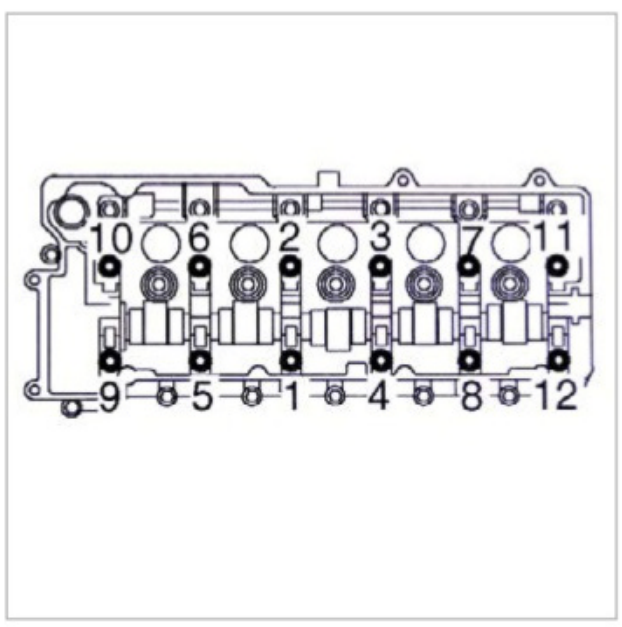
Two pairs of hands did it

20 The new cylinder head is placed on the engine block, carefully located on the new steel dowels, and is ready to be bolted down.



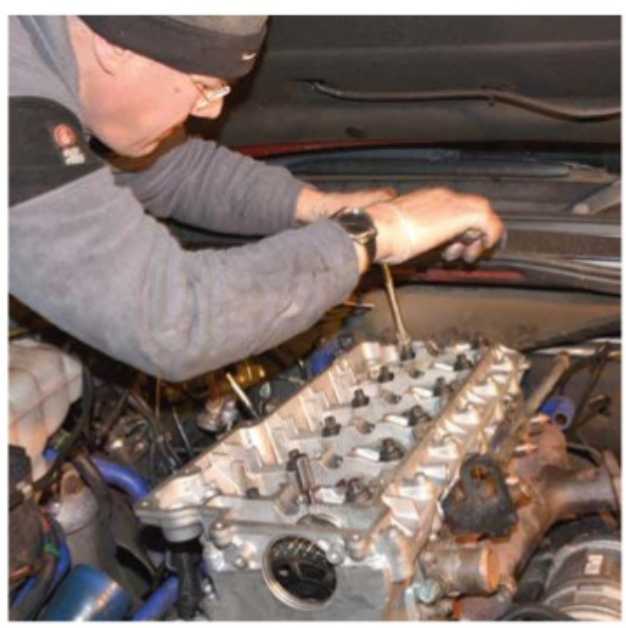
Discard the old ones

21 Head bolts are designed to stretch, so new bolts must be used when re-fitting a head, taking care not to drop them in, initially screwing in by hand.



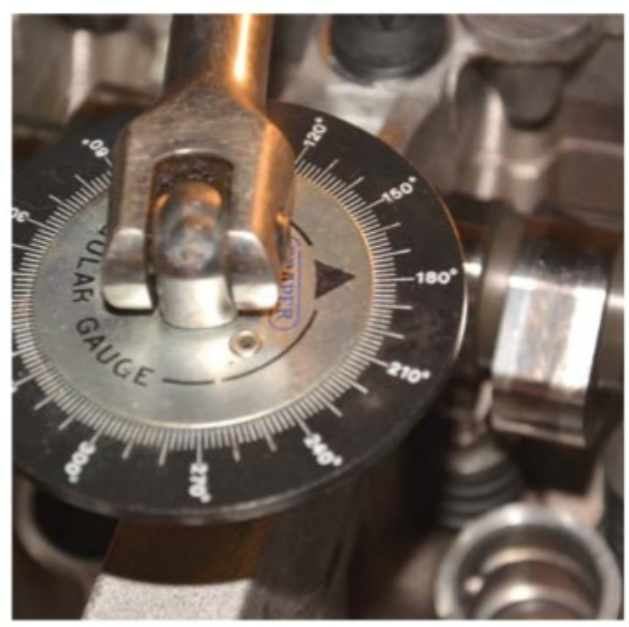
Crucial operation

22 The procedure for tightening the cylinder head bolts is in the workshop manual. They're tightened progressively in this sequence, working outward from the centre.



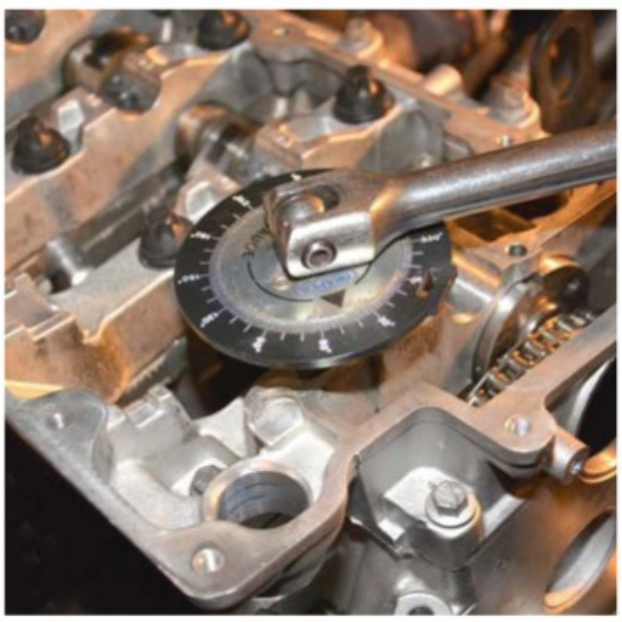
Using a torque wrench

23 Initially, the bolts are tightened using a torque wrench, first working through the sequence to 30 Nm, and then again through the sequence to 65 Nm.



Essential angle gauge

24 After tightening progressively in the correct pattern to 65 Nm, this angle gauge is employed to turn each by a further 90 degrees, then by another 180 degrees.



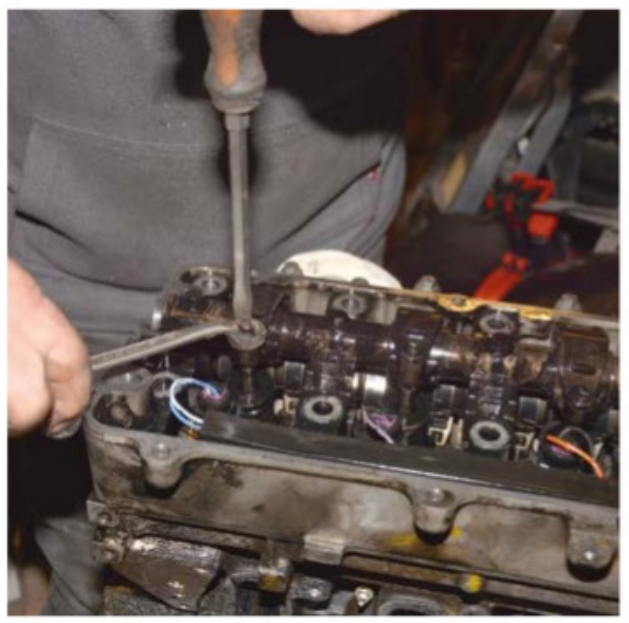
The final sequence

25 The fifth tightening sequence is to turn each bolt through a further 45 degrees and, once this is done, the cylinder head is successfully tightened down.

Installing the rocker gear and injectors

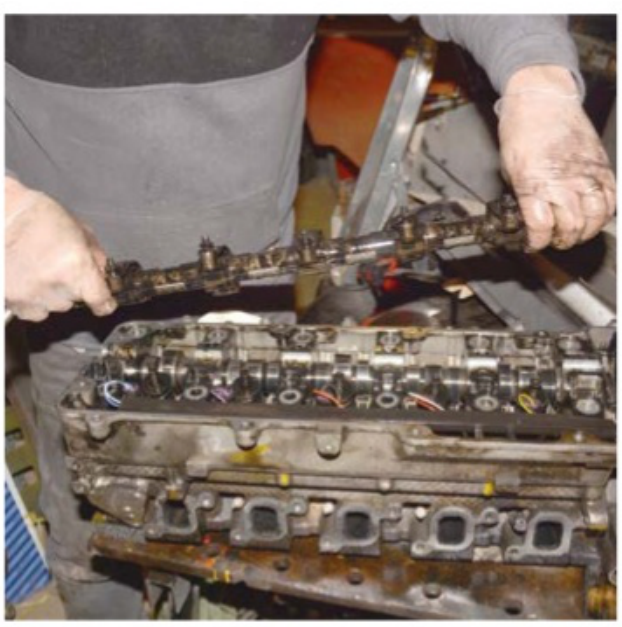
WITH the new cylinder head correctly bolted in place on the engine, we can now add the remaining ancillary components to the engine and connect everything up in turn to complete the job. We show the injectors and the injector rocker shaft being fitted here. Additionally, the final touches will be refitting the engine cover – often call the acoustic cover – and of course, re-filling with fresh engine oil and new coolant.

Coding: Each injector has a unique code number that is stored in the vehicle's ECU according to its cylinder location in the engine. Thus, on this particular job, when these original injectors are transferred to the new head, they must be fitted in their original cylinder positions. In other cases, such as fitting new injectors, a different assembled head, or even swapping an engine, each injector code and its position must be entered into the ECU using diagnostic equipment.



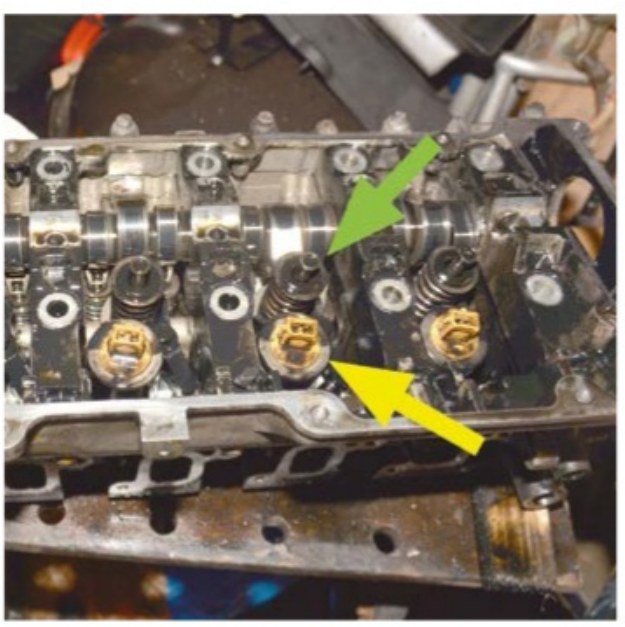
Liberating the injectors

26 On the old head, locknuts are slackened and the rocker arm adjuster screws loosened to give maximum clearance between the screws and the top of the injectors.



Injector rocker shaft

27 The six rocker shaft bolts are loosened and removed, allowing the shaft to be lifted from position for eventual transfer to the new cylinder head.



Exposed

28 We can now reach the five injectors, which must be pulled out to then transfer to the new cylinder head. Green arrow shows injector, yellow shows attached solenoid.



Hammer action

29 The injectors won't pull out by hand. This puller from an online auction site grips the injector in its jaws, and sliding weight (top) provides inertia to pull.



Easy pull

30 With the jaws gripping the injector (being careful not to damage the yellow electrical connector on the solenoid) a pull up on the sliding weight frees each injector.



Same cylinder as before

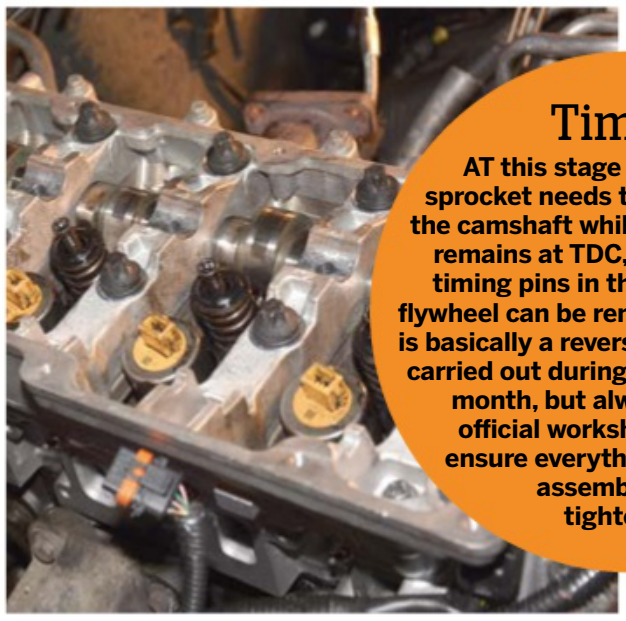
31 As each injector is removed from the old head, it is fitted to the new head in exactly the same cylinder position, so ECU recoding is not required.



Check for clearance

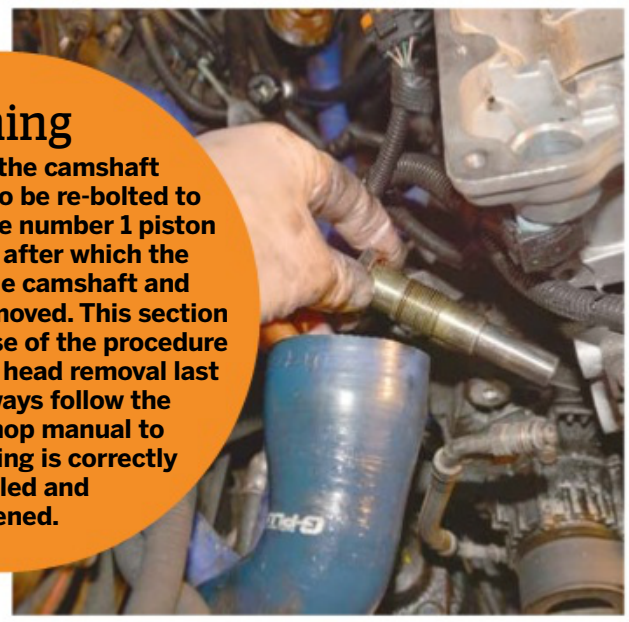
32 Before this injector can be pulled out, the camshaft will need to be rotated clear. You can see the cam lobe is overlapping the injector base, preventing extraction.

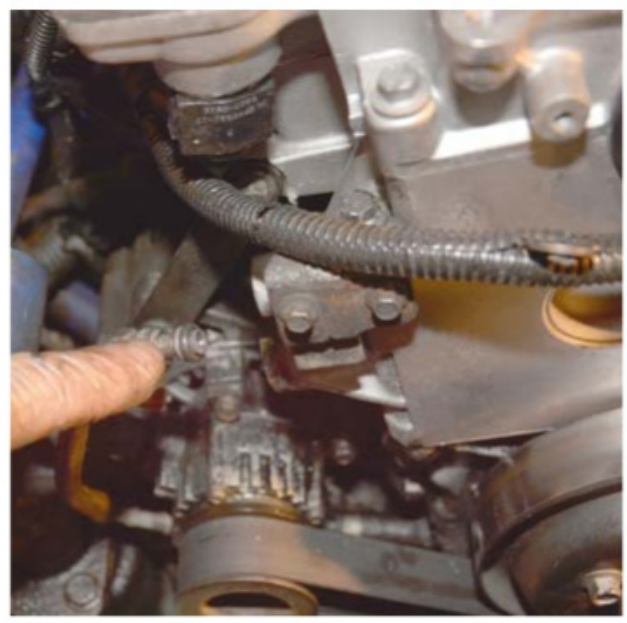
www.britpart.com BRITPART



Timing

AT this stage the camshaft sprocket needs to be re-bolted to the camshaft while number 1 piston remains at TDC, after which the timing pins in the camshaft and flywheel can be removed. This section is basically a reverse of the procedure carried out during head removal last month, but always follow the official workshop manual to ensure everything is correctly assembled and tightened.





Present and in correct order

33 The injectors are now all in position, so we're ready to fit the rocker shaft and injector wiring harness, but first we can tidy some other parts away.

Bolts and components

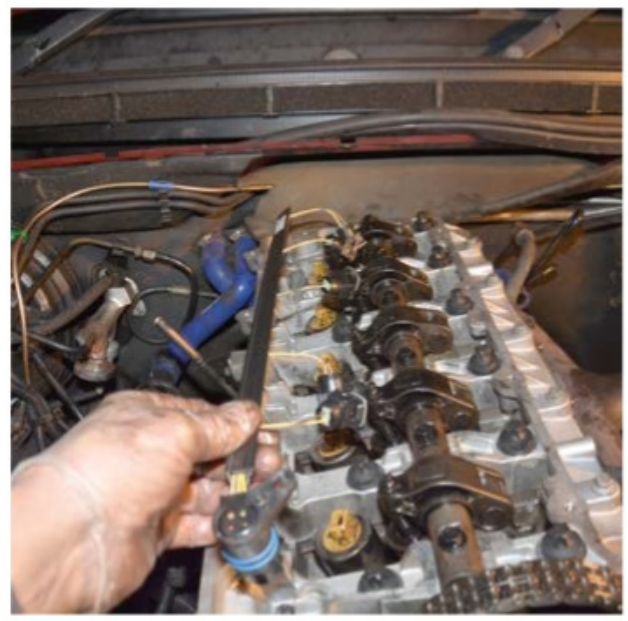
34 This timing chain tensioner is among a number of parts and components that need to be refitted, just as they were earlier removed.

Also pipes and connections

35 Another component to be dealt with is the vacuum pump pipe union, reconnected to the cylinder head with a new O ring seal fitted.







Refitting

36 The rocker shaft assembly is located onto the dowels, and the retaining bolts fitted. These are then tightened to 32 Nm, working from the centre outwards.

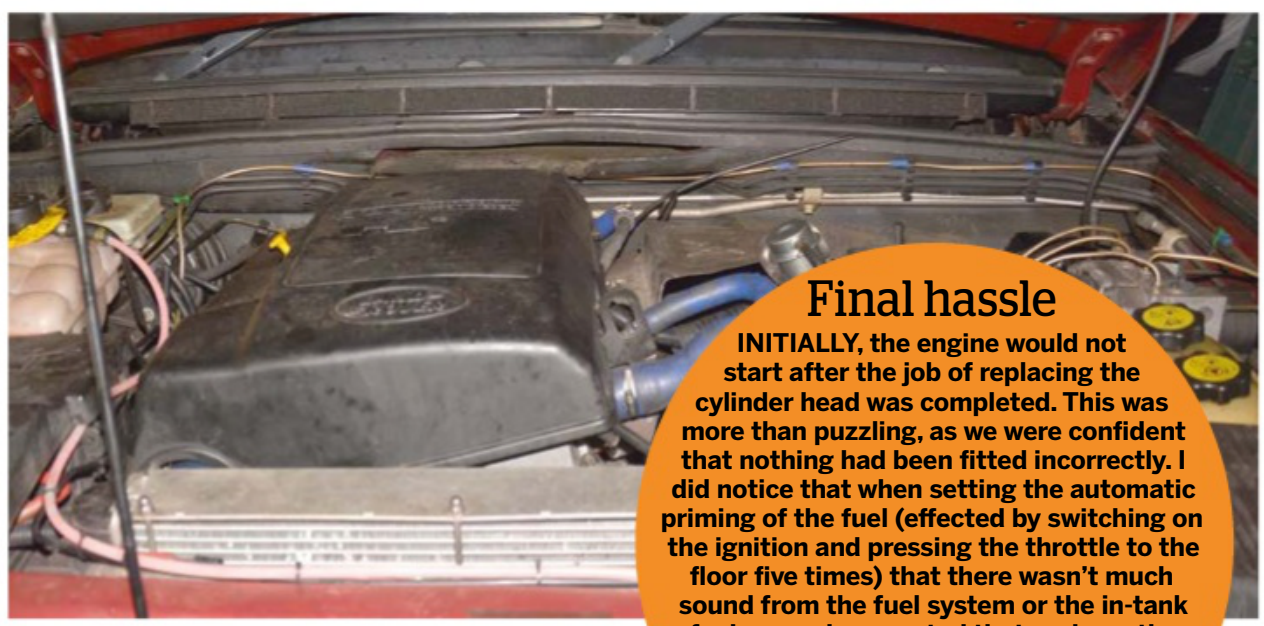
Correct setting

37 The rocker adjuster screws are adjusted for each cylinder, with the camshaft lobe at full lift, until the injector just bottoms out – then backed off one turn.

Secure each of them

38 After each injector rocker adjuster screw is set, the lock nut is tightened to 16 Nm. When complete, the injector loom is fitted back in place.





Final hassle

INITIALLY, the engine would not start after the job of replacing the cylinder head was completed. This was more than puzzling, as we were confident that nothing had been fitted incorrectly. I did notice that when setting the automatic priming of the fuel (effected by switching on the ignition and pressing the throttle to the floor five times) that there wasn't much sound from the fuel system or the in-tank fuel pump. I suspected that perhaps the fuel pump was weak and could not cope with our new – and unworn – fuel pressure regulator. We duly fitted a new OEM fuel pump, after which the engine fired up immediately.

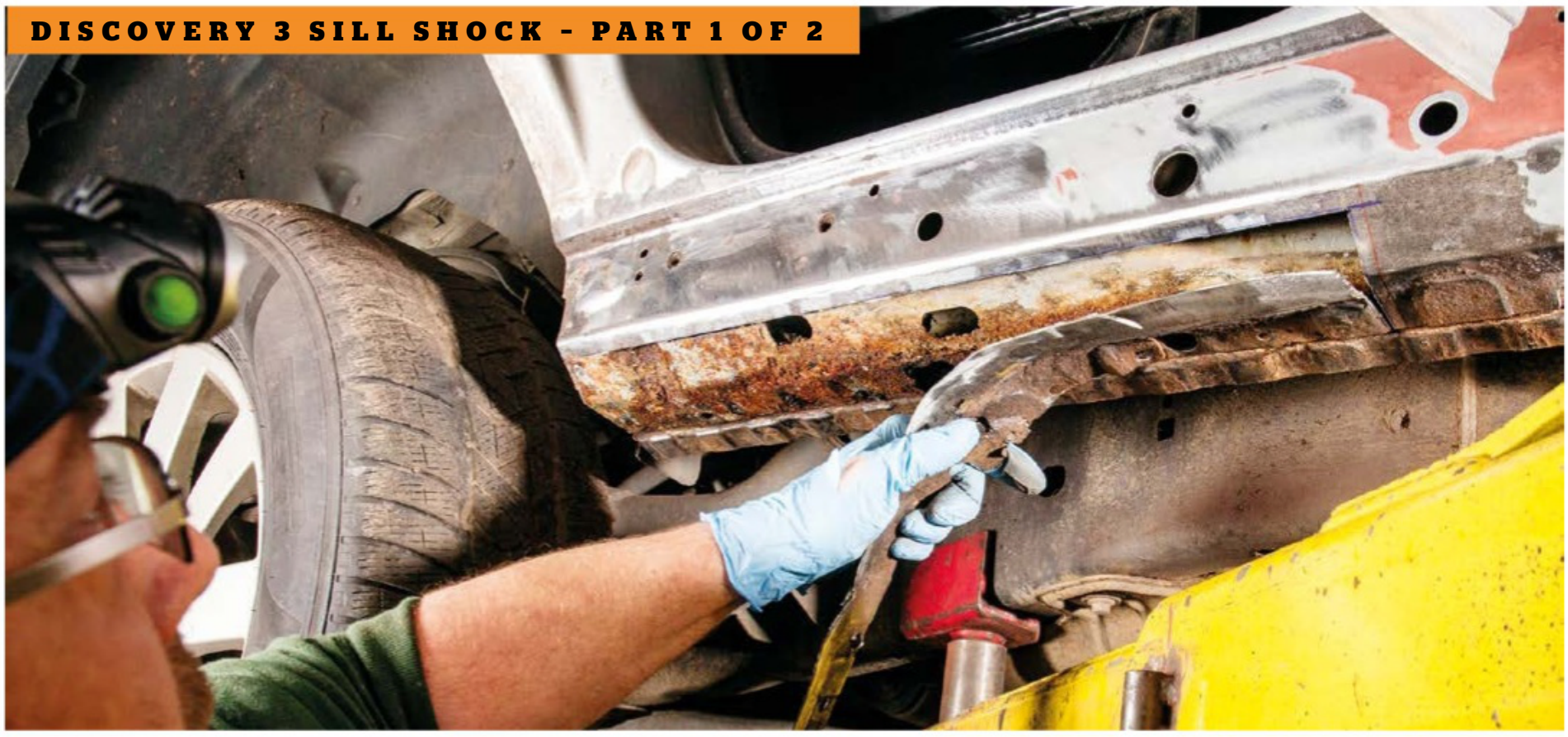
Remaining ancillaries

39 All of the other components that we had removed, such as the turbocharger and intake manifold are refitted. Here, the rocker cover is back in place.

Final touches

40 The last job is to refit the acoustic cover on the engine and the job is complete. We can now start the engine for the first time.

DISCOVERY 3 SILL SHOCK - PART 1 OF 2



Thought you were safe with a D3?

Disco 3 has enjoyed a rust-free reputation, but underfloor and sill corrosion can rival the notorious Disco 1. Alisdair Cusick witnesses D3 disintegration



CONTRIBUTOR
ALISDAIR CUSICK

NEED TO KNOW

COST: See next instalment
TIME: 1 week
DIFFICULTY:
MODELS: Discovery 3, Range Rover Sport 1
TOOLS: Metalworking power and hand tools, angle grinder, wire brushes, drill, ruler, pens, scraper
CONTACT:
• Machinor: 07891 518586;
• James Holmes: 07507 787864
WORK SAFELY:
• Wear protective gloves when working with corroded metal and with new sheet metal. Beware of sharp edges
• Wear a full face mask and a particle filter to prevent inhalation of dust when grinding and cutting metal
• Before grinding, check that sparks cannot land on anything that is inflammable, and keep a fire extinguisher to hand

WE'RE all familiar with corrosion issues on Land Rovers. They're no different to regular vehicles but, because of their mechanical longevity, Land Rovers have a lifetime much greater than that of an ordinary vehicle. That increased life also increases the exposure of the structure to water, hence corrosion becomes a problem on steel parts.

Advances in body sealing processes and electrophoretic coating (e-coat) during new vehicle assembly mean that the corrosion seen on Series models and early Discovery and Range Rover steel structures is largely a thing of the past. Broadly speaking, we just don't see heavy body corrosion on post-2000 Land Rovers. Corrosion on later cars tends to be more local: top tailgate corners or the stone-chip exposed rear wheel arch lips on L322 Range Rovers, for instance, or the rear chassis of Discovery 2. The corrosion we all associate with original Discovery and Range Rover body shells just didn't happen to Discovery 3s, but it does now.

Prepared to be very shocked. Older Discovery 3s do indeed corrode, and potentially the problem can be much more acute than it may appear. Light surface corrosion on early Discovery 3 sills has started to appear for a year or more, and MoT failures on D3 sill corrosion are now upon us. The odd crusty bubbles usually begin on the rearmost lower edges of the sill, under the rear passenger door. Wise owners will nip it in the bud, rubbing it back to clean metal and protecting it in quality paint. But the problem with rust is never what you can see, it is what you can't. As we're about to show.

When James Holmes tipped me off that he had a D3 in for corroded sills, I don't think even he realised what we would find. The car is a 2005 model and used off-road regularly, and it's from Luxembourg, where the owner couldn't find anyone local willing to tackle the job. The truck is fitted with beefy rock sliders held on by bolts fitted into the sills. When removing the rock sliders, the owner became concerned about the sill corrosion, so wanted it repairing properly. Eventually, through the Discovery specialist pipeline, he was put in touch with James Holmes in the UK.

With the rot cut out, new, correctly shaped repair sections would be needed. The only panels available, James was told, are complete bodysides, for a considerable cost – presumably around the accident repair industry. So instead, bespoke repair panels would have to be made up from scratch. For this, James turned to Stuart Jay of Machinor.

Stuart is a sheet metal finisher, who also fabricates rare, one-off, or low volume panels for Land Rover products. James' and Stuart's paths have crossed in the past, having worked together on prototype and production cars. Typically they work as a pair: Stuart being the tinny, and James being the welder, and each has a full understanding of the other's work, so each appreciates what the other needs. Working in synergy, their efforts balance not just on the accurate shaping of the new part, but also factor in how and where it will be fixed onto the next panel. In that fashion the duo have frequently made and fitted panels working to 1 mm tolerance on cars costing eight figures. They were happy they could overcome anything they unearthed, and accurately replicate the factory original panel for a neat job.

www.britpart.com BRITPART

Investigating the corrosion



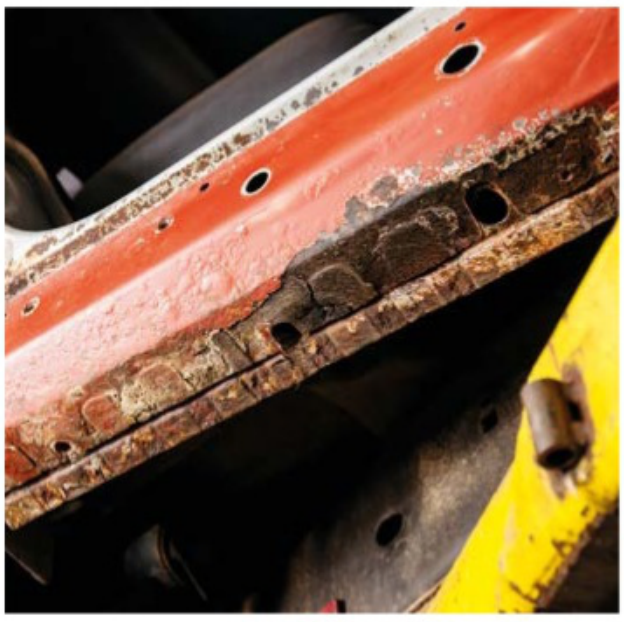


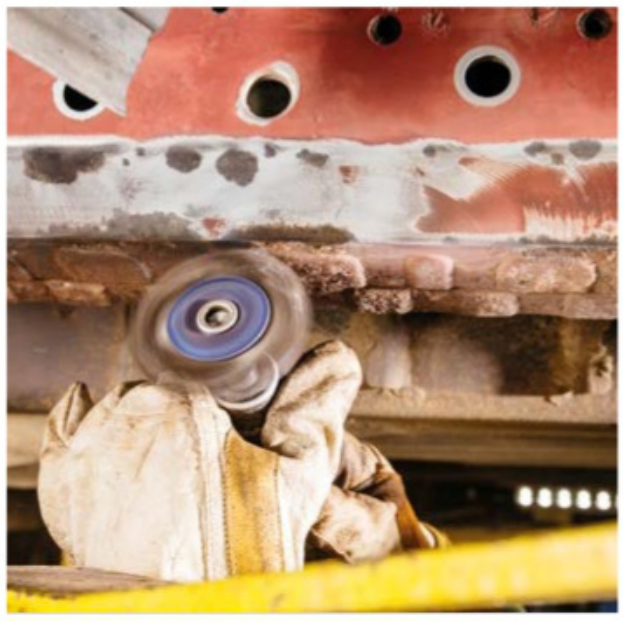
Plastic protection

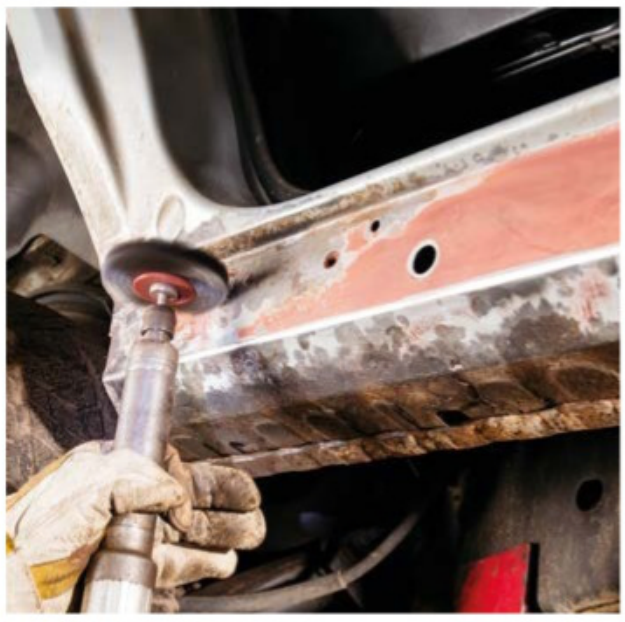
1 Discovery 3 sills are nicely protected from light impacts and early surface rust by these tough composite sill trims. They need to come off for inspection and repair.

First inspection

2 With the rocksliders and sill trims (see page 142) removed, this left hand side appears the worst. Corrosion is deep from the rear arch forward to the B post.







And the right hand side?

3 The opposite side, after wiping clean, doesn't look as bad, and should be a simpler repair. This is the side chosen to start on.

Have a go

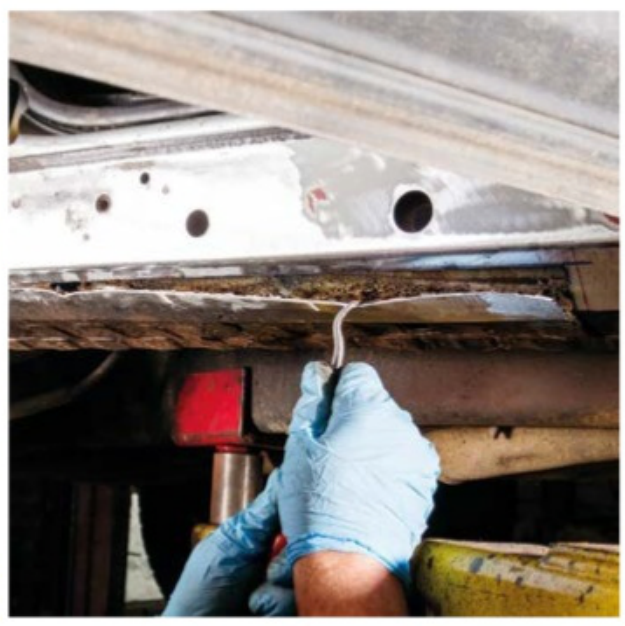
4 James tentatively tries cleaning back the surface. Red oxide paint has obviously been used to try add some protection in the past.

Cutting deeper

5 As needed, the abrasion level is increased, using a number of tools, wheels and pads. Thankfully, the vertical faces look solid.







No rushing in

6 Before picking up a cutting disc, James and Stuart agree on where to cut, deciding what to remove, what to keep, and where to stop.

No going back

7 Out come the cutting tools, and James neatly makes a test cut. He feels as he goes, because he doesn't know what structure is behind there

What lies beneath?

8 Using a pick, the edge of the body skin is peeled back. As it pulls away, sand and fine dried mud ominously pour out.



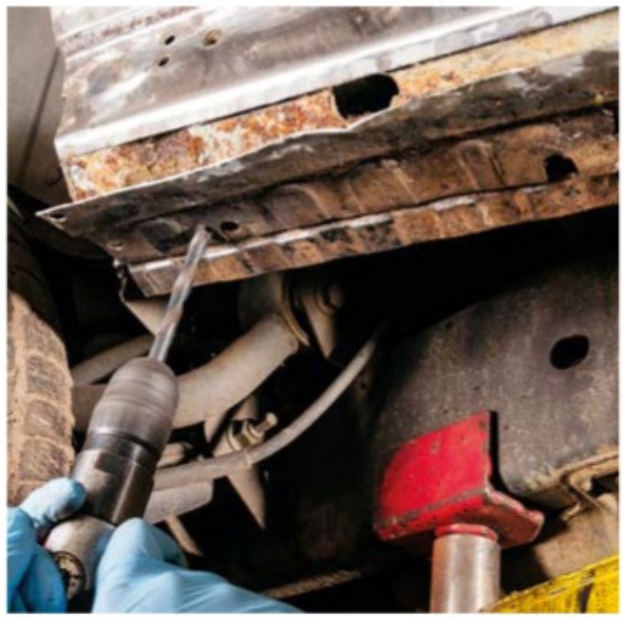
One-off?

9 Thinking it may just be that one area, the rest is peeled away. Sand continuously drops out all the way along leaving a pile on the floor.



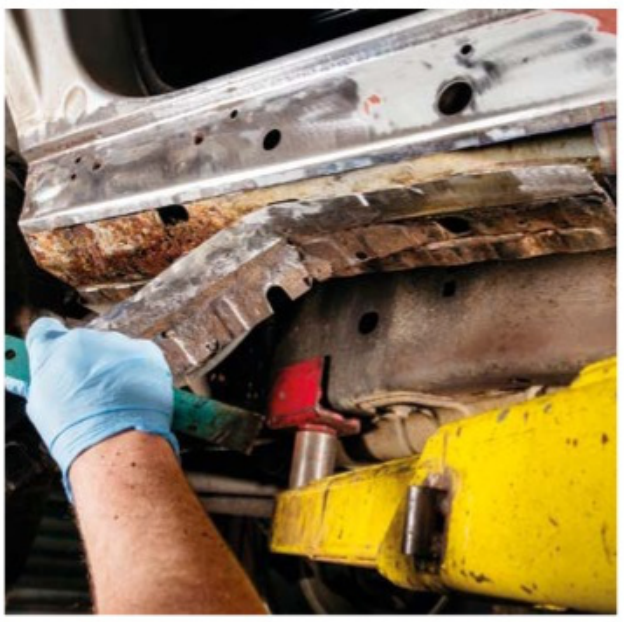
Bucket and spade?

10 There's so much in there, a vacuum is used to suck out as much as possible. It becomes apparent the inside of the sills is packed full of silt.



Remove it

11 The spot welds are drilled out. The aim is to keep this section in one piece for Stuart to reference as a template for the repair panel.



Big reveal

12 James lifts off the section. There's another skin underneath the outer sill. That looks like it has surface corrosion too. Question is, how deep is it?



Repeat the process

13 Out come the wire wheels and pads as the process starts again, and this inner skin is cleaned back to good metal. The corrosion cuts off quickly, a good sign.



Uh oh

14 It looked good, until a corner of a hole in the inner sill breaks off. Suddenly the factory hole is a great deal bigger. A one-off?



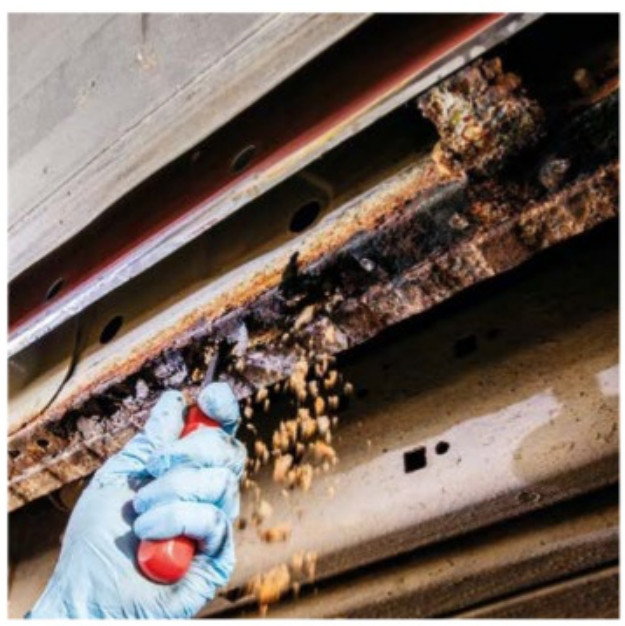
Not just the plan falling apart

15 Shocked, James touches the corner of it to feel the thickness and strength. Glove off for maximum feel, the metal has all the strength of marzipan.



Chase it forward

16 More of the outer skin is cut off, aiming to find good metal on the inner sill. Half a metre later, they stop under the driver's sill.



Sickening feeling

17 Dark purple corrosion means rust is very deep. James touches it with a pick, but it falls away in dry flakes, releasing lots more sand from inside the sill.

www.britpart.com BRITPART

Taking stock of the situation

HEREIN lies the problem and the cause, in one. Where the car has been used off-road and presumably immersed in silty water, that water fills the sills up. The holes through which the rock sliders are bolted are some of the few outlets in the sills for water drainage. With those blocked by mounting bolts, the water is left to slowly drain from the narrow louvres in the lower edge of the sill panels. Though the water drains through those, the silt collects here and remains in the sill sections. Eventually silt blocks up the drain louvres on the lower sill edges completely. With sills full of captured silt, that basically turns the inside of them into a huge sponge. Retained moisture means corrosion is hastened, and we find ourselves in this scenario.

The lesson for everyone here is that whilst the outer, visible sill may begin to corrode, the interior one has the potential to be much worse. We can suppose, with this Discovery, that watery off-road use has accelerated the rate of corrosion. Outer sill rust is being reported fairly readily on internet forums, but the big issue is the condition of the inner sill, which remains unknown until you cut into the car. If this issue has the potential to affect Discovery 3, it is likely to also happen on Range Rover Sport 1.

Our top tip is that spraying a can of quality cavity wax in your D3/Sport sills is definitely worth doing.

Rock sliders or sidesteps bolt to these sills, so the effort of replicating the factory panels in this feature is not just for aesthetics, but for strength. Whilst it would be possible to simply plate up the rust once it had been cut out, the question of strength is apparent. If the repairs don't put the original internal strength back into the bodywork, or if corrosion is left unattended, the rocksliders and the corroded sill areas will have the potential simply to pull free from the body.

Prepare for repair



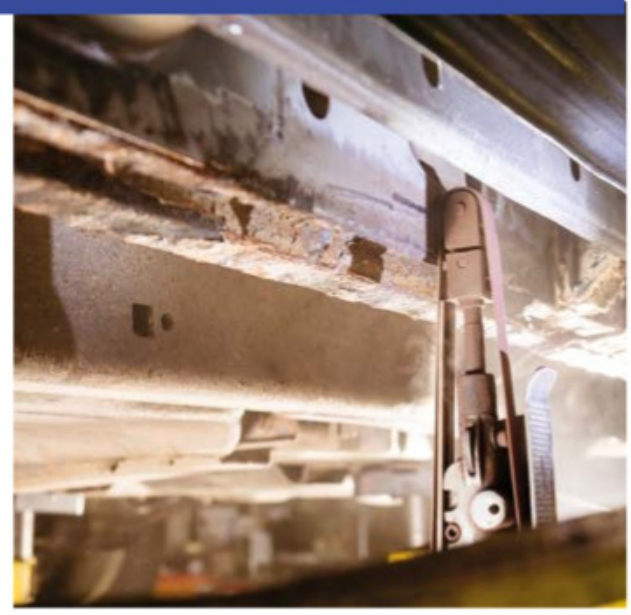
Get it off

18 The inner sill rot also has to come out so, as with the outer sill, a top cut line is agreed on and the lower edge's spot welds are drilled out.



End of it?

19 Here, the inner sill has been removed. The surface behind that still looks corroded. But will it clean back to solid metal that can be welded to?



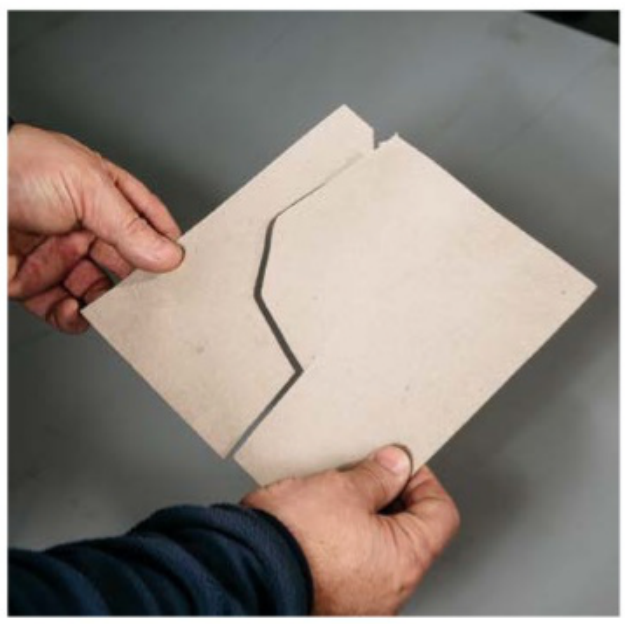
Thankfully, yes

20 Wire wheels and finger belt sanders are used to clean it back. Luckily, we find solid, clean metal again, and a clean edge top and bottom to work to.



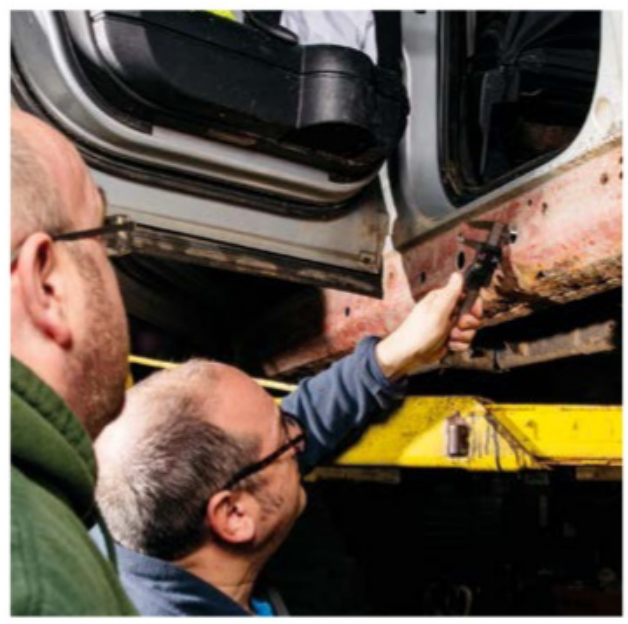
Like a new pin

21 After considerable cleaning up, the corrosion is gone and a heavy coat of zinc rich weld-through water resistant primer is applied, as we think about the repair process.



Meanwhile....

22 As this has all been going on, Stuart has been meticulously measuring and making many templates to produce the parts required.



Copy the factory part

23 As well as the basic profile, the positions of all holes, weld nuts, louvres and mounting points are measured. The other side is cross-checked also.

NEXT MONTH Completing the job: With the car cleaned back to solid metal and prepped, we see how Stuart forms the inner and outer sill repair sections, accurately duplicating every feature of the factory part. Once made, the pair show us how those basic panels are fitted to the car to complete the job.

Check and protect your D3



ED EVANS, TECHNICAL EDITOR

DISCOVERY 3 has survived the years well, and upper body corrosion is extremely rare, but the underside has been of concern for a few years now. Apart from the sills, the underbody over the rear axle and park brake module also suffer from surface rusting that needs to be kept in check. The chassis rails alongside the sills, and the structure around the rear axle are also prone to surface rust so, although the frame is solidly built, it isn't going to last for ever. If keeping a D3 for the long term, it's worth having the underside de-rusted and a wax rust inhibitor and protector applied. Doing this now (also check rear axle brake pipes) will be cheaper than getting involved in complex structural repairs further down the line.



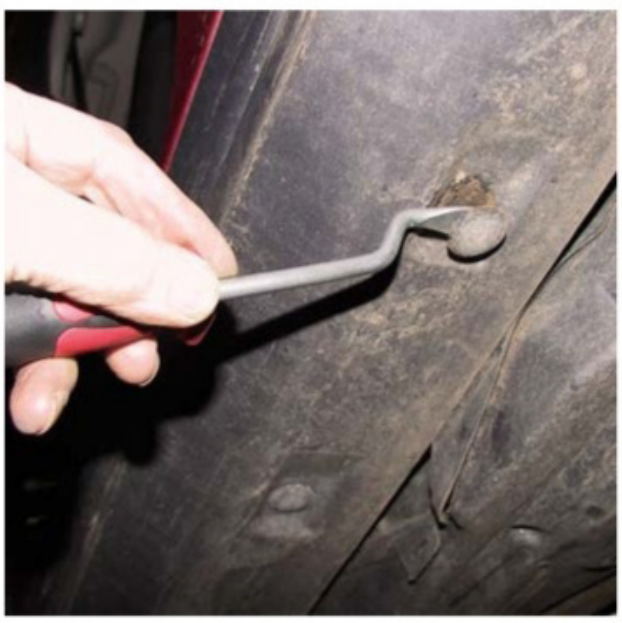
Cover-up

CORROSION along the upper part of the outer sills is hidden behind the plastic sill trim, which possibly helps to retain moisture. It's easily removed.



Unscrewed

TO remove the sill, these end plate securing screws need to be removed. Be careful not to damage the rusted heads – a good driver is essential.



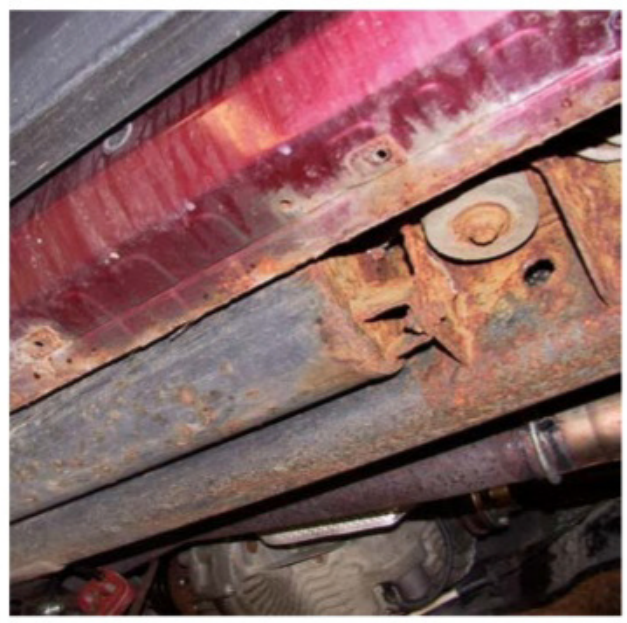
Unplugged

THESE plug clips hold the trim along the top side and underside. A trim clip removal tool has them out in a jiffy. Buy some replacement screws and clips.



Exposure

THE trims can then be eased off, as the dirt drops out. This exposes the outside. The inner sill next to the chassis is easily inspected from underneath.



Spreading

IT'S not only the sills that corrode. This air suspension reservoir mounting bracket on the chassis near the body mount is heading for trouble. So check the chassis, too.



Writing on the wall

THE badly rusted rear underbody on this 2005 Discovery 3 reached this state after eight years on the road. So we can expect significant problems after 16 years.



Protection

DISCOVERY 3 was built with good body protection, but it doesn't protect for ever. It's worth injecting wax protection through the holes into the sills to protect the inner structure.

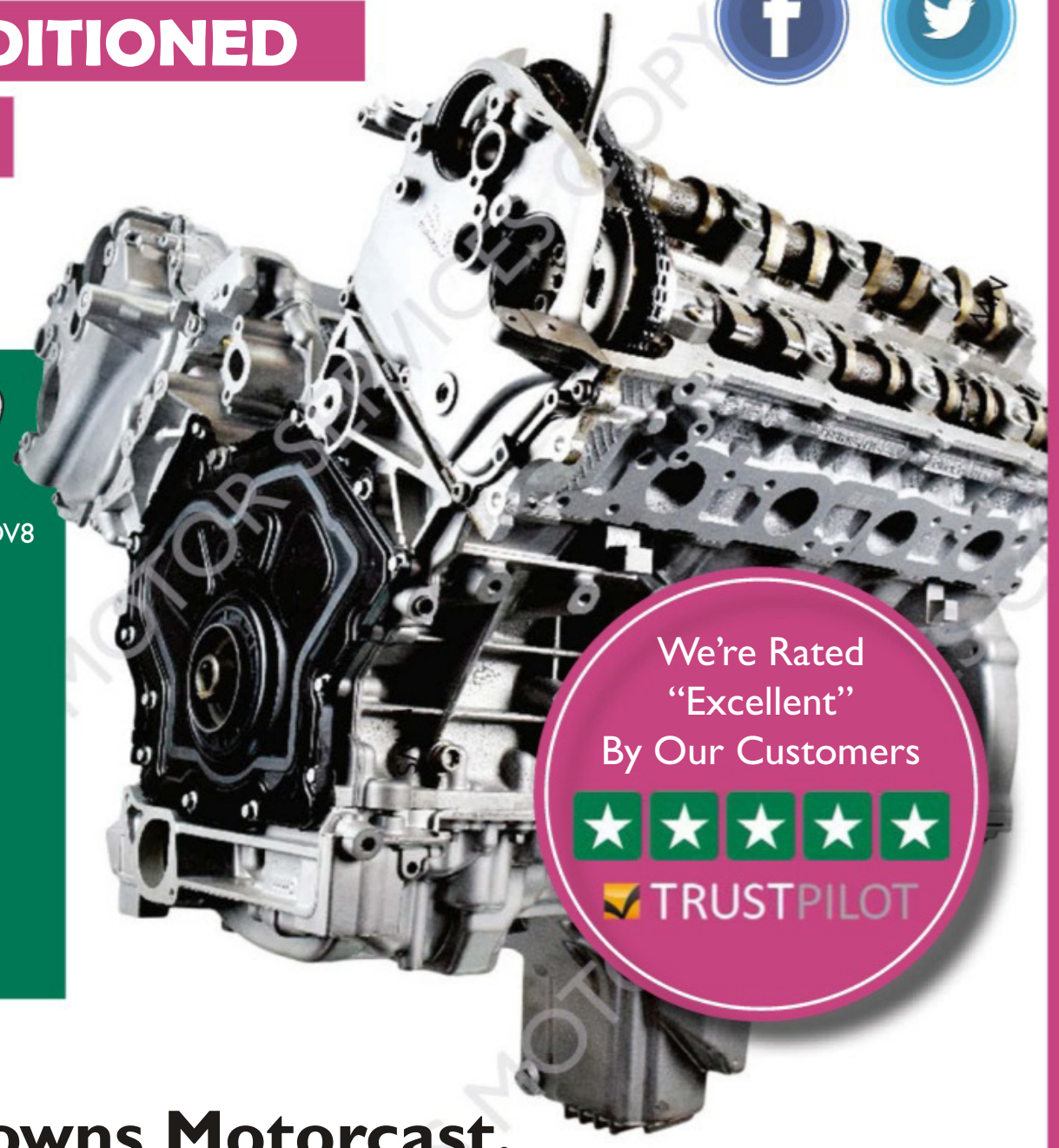


Worst case

OFF-roading tends to blast snow, water mud and grit in all the nooks and crannies. If the confined spaces don't drain and dry out, the rust takes hold.

BILLINGOFFROADSHOW.CO.UK
BRITPART

EUROPE'S NO.1 RECONDITIONED LAND ROVER ENGINE & PARTS SPECIALIST



ENGINES START AT £2000

- Range Rover Vogue 5.0 SC
- Range Rover Sport 5.0
- Range Rover Evoque 2.0
- Land Rover Disco 4 3.0 V6 S/C
- Range Rover Sport 4.2 S/C
- Many more engines available
- All engine parts available for Land Rover & Jaguar

- 3.6/4.4 TDV8
- 3.0 TDV6/SDV6
- 2.2 TD4/ED4
- 3.0 TDV6/SDV6

- 3.6/4.4 TDV8

Now Available:
SOLID BILLET CRANKSHAFT
3.0L TDV6 / SDV6
- only from NWS

We're Rated "Excellent" By Our Customers

TRUSTPILOT

NWS MOTOR SERVICES

NWS now owns Motorcast.

40 Years of experience in supplying cylinder heads & repairs

Motorcast

THIS MONTHS MOST POPULAR ENGINE PARTS

2.7 TDV6 PARTS

1. OIL PUMPS - £140
2. CRANK BEARINGS - £250
3. RECON CRANKS - £800
4. PISTONS - £90
5. TIMING BELT KIT - £85

3.0 TDV6 PARTS

1. OIL PUMPS - £140
2. CRANK BEARINGS - £250
3. TIMING BELT KIT - £85
4. TURBOCHARGER - £690
5. CON RODS - £85



Visit our website for over 20,000 products. All prices exclude vat.
All parts can be purchased in our online shop. Fitting is also available.

NWS MOTOR SERVICES

KEEPING YOUR LAND ROVER ON THE ROAD

NWS Motor Services • A41 • Whitchurch • Shropshire • SY13 2HX
01948 840888 ***www.nwsmotorservices.com*** ***info@nwsmotorservices.com***

LRM PRODUCT TEST



Auto-darkening welding masks

Your personal window on welding has never been better, says Gary Stretton

THIS product test comes with a wallet warning: seasoned welders might think they don't need to replace their old helmet, just as I did until evidence to the contrary was very much staring me straight in the face. A simple rule of thumb is to suggest if your current welding helmet doesn't have a GRIND setting, it's unlikely to benefit from improved sensors, better controls and superior design, too.

Auto darkening helmets have dominated for some years and with good reason. Long gone are the days of constantly flipping a single shade helmet down over your face just before striking up an arc. Being able to clearly view your work before, during and immediately after the welding process is key to accuracy and reduced effort spent in dressing ugly welds. Viewing the weld pool of molten metal as you progress gives ultimate control, and you know whether to continue, or stop and adjust settings or technique. Starting and finishing a weld in exactly the correct position is best achieved with an auto helmet because filter reaction to the arc is taken care of automatically.

Technological developments mean the True Colour helmet is now an affordable reality, eliminating the green tint typically present in variable and passive helmets. Instead, you are viewing an almost LCD TV-like rendition of the weld pool in superior detail. It's a dramatic shift that regular welders will greatly appreciate. That said, the latest variable shade helmets are also far more advanced than their predecessors and prices are keenly competitive, so don't dismiss them unnecessarily.

Budget is a key factor for DIY users, but I will say the more you weld, the quicker you improve, so a good helmet will help you achieve better results sooner. If you're replacing an old helmet check its spec and use it as your replacement benchmark.

All the helmets tested have a GRIND function which allows for continuous working without the need for switching to goggles or a visor when using an angle grinder or cutting disc. Simply switch to GRIND and carry on without crawling out from under a vehicle chassis or wheel arch.

Adjusting the shade sensitivity DIN value provides the best view of the weld pool and best eye protection, according to the weld process and material being welded. An almost instant filter reaction time reduces eye fatigue and exposure to the arc light. Adjustable delay of the reaction time back to ambient after the arc has stopped but the weld pool is still glowing, is also best for prolonged working and reduced eye fatigue. More sensors mean rapid detection of the welding arc, especially when working with obstructions. All this can be powered by solar or batteries, though I prefer both because my workshop doesn't always get sunlight.

Here's what to look for...



A larger screen provides a better view with improved peripheral vision



External or internal adjustments? External can be knocked accidently; internal require helmet removal



Adjustable straps ensure the best fit possible to suit your preference. Very important for spectacle and fume mask-wearing, too



'TEST' feature ensures filter reaction is working before an arc is created

www.britpart.com BRITPART

SILVERLINE Solar auto & grind



Traditional looking helmet with up-to-date features

PRICE: Typically £52.21
CONTACT: silverline-tools.com (Item 757060)

Easy to set up and use with supportive head straps. Filter reactions were more than capable, and the screen offered a clear view of the welding area. No-fuss welding doesn't get much easier.

KEY FEATURES:
- Suitable for MIG, TIG & Arc (MMA/GMAW)
- Screen size: 92 x 42mm
- Arc sensors: 2
- UV & IR protection DIN16
- Light shade: DIN 4
- Variable shades: DIN 9-13
- Adjustable delay time and sensitivity
- 4-way adjustable padded headband
- Filter reaction time light to dark: 1/15,000 second
- Spare screens included
- Certified to EN379 & 175



Weld pool vision is clear with excellent reaction times



Three-stage switching for sensitivity and delay settings



Grind function selected via rotary dial

CLARKE Auto solar powered

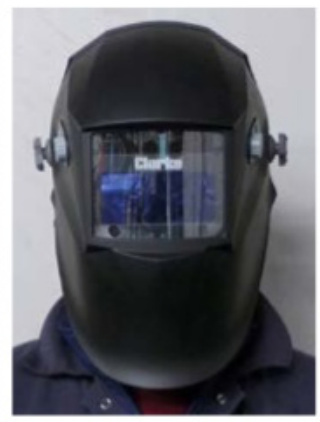


Streamlined version of the traditional design

PRICE: Typically £59.98
CONTACT: machinemart.co.uk (Item PG4)

Plenty of features to satisfy the keen DIY-er and more experienced welder. I liked the combination of inner and outer control functions. Filter shade was easy to control and adjust for a well defined weld pool view. The head bands were very comfortable. Test function welcome at this price.

KEY FEATURES:
- LCD screen
- Fully automatic on/off
- Solar and batteries
- Suitable for MIG, TIG & Arc (MMA/GMAW)
- Screen size: 98x43 mm
- Arc sensors: 4
- UV & IR protection DIN13
- Light shade: DIN 4
- Variable shades: DIN 9-13
- Adjustable delay switch and filter TEST function
- Filter reaction time light to dark: 1/30,000 second
- Spare screens included
- Certified to EN379



An easy helmet to wear and use with clear weld pool vision

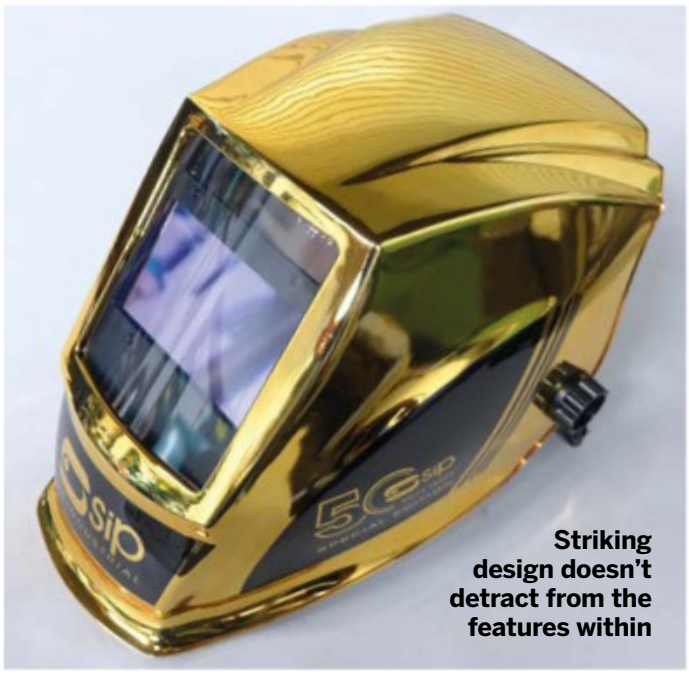


Four head straps create a very comfortable fit



Test function plus external controls

SIP Meteor 50th edition



Striking design doesn't detract from the features within

PRICE: Typically £75
CONTACT: sipuk.co.uk (Item 02886-50)

SIP's celebration model has the looks and performance to match. Good balance in use with easy to set up controls including the test feature. Filter function is excellent with plenty of variable scope for different materials and weld processes including plasma cutting.

KEY FEATURES:
- Viewing screen: 100 x 59.5 mm
- Grinding Shade: DIN 4 Shade
- Number of sensors: Not known
- Plasma Cutting Shade: DIN 5 - 9 Shade
- ARC/MIG/TIG Shade: DIN 9 - 13 Shade
- Battery / Solar 2x Lithium CR2450 3 v
- Filter reaction time light to dark: 1/10,000 second
- Delay Time: 0.1 - 0.8 seconds
- Test button
- Adjustable padded headband for more comfort
- Integrated low shield power warning light
- Lightweight construction: 0.5 kg



Excellent view of the weld pool via adjustments to the settings



Test feature and all other controls housed internally



Chunky blue support is very comfortable

DRAPER Solar auto vario-shade

Striking and functional visor reminiscent of motorsport designs



PRICE: Typically £71.46
CONTACT: drapertools.com (Item 34358)

A well balanced helmet for prolonged, comfortable use. Easy to set up and use with plenty of control over the filter reactions. Good support in the up position, too. The screen delivers a clear welding view.

KEY FEATURES:
- Screen size: 92x42 mm
- Power mode: Fully automatic
- Power supply: Solar panel
- Switching time light to dark: 0.04 ms
- Switching time dark to light: 0.15 ms
- Light shade: DIN 4
- Variable shade adjustments: DIN 9 - 13
- Arc sensors: 2
- UV/IR protection: Up to DIN 16
- Weight: 830 g
- Certified: EN175, BS EN 6100-6-3 and BS EN 6100-6-1



A well-balanced helmet with a defined view of the weld pool



Two controls internally, shade and GRIND controls sited externally



Three-band straps works well. Good head top protection from spatter and sparks

www.britpart.com BRITPART

LASER Auto darkening solar



Confident, well-protected design for this pro-use helmet

PRICE: Typically £110.80
CONTACT: toolconnection.co.uk (Item 6095)

EASY to set up and use with supportive head straps. Filter reactions were more than capable, and the screen offered a clear view of the welding area. No-fuss welding doesn't get much easier.

KEY FEATURES:
- Suitable for MIG/TIG and arc welding
- Viewing lens: 98x62mm
- Power on/off fully automatic
- Reaction time: 1/25,000 second light to dark
- Shade 9/13
- Grind function
- DIN 4 to DIN 16
- Self-test button
- Sensitivity control low to high via dial
- Dark to light time delay via dial
- Power:Solar/2 x CR2450 batteries
- CE Certificate/ EN379/EN175



All controls kept internally to avoid accidental misjudgments



Excellent screen with good definition of the weld pool



Ergonomic strap design is very supportive and comfortable

SEALEY True colour

LAND ROVER MONTHLY DIY WINNER PRODUCT TEST 2020



Embrace your inner cyborg and the latest technology

PRICE: Typically £59.60
CONTACT: sealey.co.uk (Item PWH613)

The simplicity of the silver design understates just how well this helmet performs. The clarity and colours of the weld pool were a genuine surprise. Filter shade adjustments and controls are easy to master.

KEY FEATURES:
- Features True Colour technology for improved visibility, less eye strain and realistic colour recognition
- Viewing Area: 96x38 mm
- Suitable for MIG, TIG and arc
- Adjustable shade control between DIN 9-13.
- Grind: DIN 4
- Sensitivity and delay
- Nett Weight: 515 g
- Reaction time light to dark: 0.1 ms
- Power: Solar Cells
- Complies with BS EN 379, BS EN 175 and DIN standards



An easy helmet to wear and use with clear weld pool vision



Four head straps create a very comfortable fit



Test function plus external controls

TOOL-IT True Colour Alien XXL

LAND ROVER MONTHLY PRO CHOICE
PRODUCT TEST 2020



True Colour screen reveals colours and weld pool detail with ease

PRICE: Typically £89.98
CONTACT: machinemart.co.uk (Item 010127229)

THE largest screen on test also delivered a view of the weld pool with almost daylight-like clarity and colouring. The host of features simply add to the versatility and scope. It's comfortable to wear and easy to set up.

KEY FEATURES:
- TRUE COLOUR technology
- Suitable for MIG, TIG & Arc (MMA/GMAW)
- XXL screen
- Range 5-9: special low intensity
- Screen size: 100x93mm
- Arc sensors: 4
- UV & IR protection DIN 16
- Light shade: DIN 4
- Variable shades: DIN 5-9/9-13
- Adjustable delay time and sensitivity
- 4-way adjustable padded headband
- Filter reaction time light to dark: 0/00015 second
- Spare screens included
- Power supply solar + batteries (CR2032)
- Weight 545 g
- Certified to EN379 & 175



Alien design dominated by the large screen



Plenty of control for different welding types, and test feature


Four-strap head support for comfort and adjustment

VERDICT



SO, seven very capable welding helmets below or very close to the £100 mark and almost guaranteed to make you wish you'd replaced your old one long ago. First time buyers can rest easy knowing the latest technology can provide a view of the welding pool that can only enhance your skills and technique. All have the GRIND function which is a real time saving asset for anyone locked in battle with a rusty Land Rover.

Silverline's traditional style is perfect for anyone wanting a low-key, occasional use helmet with all the right features to deliver confident results. It offers good vision in a comfortable, affordable package.

Clarke's price competitive helmet offers four sensors, my favourite headstrap on test, and a clean, clear view of the weld pool. It's easy to use and includes that very useful Test function.

SIP celebrate their golden anniversary with a pro-aimed helmet that's so well balanced you could wear it all day. Plenty of features a pro would expect, especially the reaction times and levels of DIN control available. There are no spare screens included but they and other spares are available.

Draper's dramatic visor treatment shouts confidence and with good reason. It delivers an excellent view of the welding area with plenty of control of the filter. Also well-balanced in use, it's only drawback was that the visor comes into contact with any surface the helmet is placed face down on, unlike all the others which are recessed.

Laser's helmet is sleek, with all controls housed internally. It's strengths, and rightly so, are the quality of its screen and viewing area. Both delivered an excellent view of the work for confident, relaxed welding. It's comfortable and ideal for prolonged use.

Sealey's True Colour screen provided a genuine welding first for my eyes due to the colours and clarity of the screen. It's easy to use, comfy to wear and helps deliver results you'll be delighted with.

The same must be said for the **Tool-It.** This newcomer provides a huge window on the welding area without the helmet being large. The screen is excellent and had the odd effect of slowing down my welding technique to provide some of the neatest welds I've ever done. I like the external variable shade dial because I'm used to them being on the outside and accessible. The head strap is very supportive while the myriad functions are all there, easy to use and benefit from. Don't worry about the £90 price, you'll save a fortune in time and grinding discs thanks to that game-changer screen.

DIY Winner is the **Sealey** which can be found online for less than £60, while Overall Winner is the **Tool-It** for a welding mask that can only make you do better work, pro or otherwise.

BILLINGOFFROADSHOW.CO.UK
BRITPART

ACR AUTOMOTIVE
COMPONENT REMANUFACTURING LTD

www.automotivecomp.com
sales@automotivecomp.com

ENGINES



- ACR V8 remanufactured engines: Range Rover, Discovery, RR Sport
- ACR 4-cyl remanufactured engines: Series and Defender, petrol and diesel
- Turnkey, stripped, 3/4, short
- Road and competition
- CNC ported cylinder heads
- Capacity increases
- Engine management systems
- Dynamometer testing
- Electronic gearbox control systems
- Wildcat Engineering racing cylinder heads for Rover V8
- ACR Power Plus components for improved power and efficiency
- Delivery world wide

Put ACR's race-winning experience in your Land Rover

01244 539196

www.realsteel.co.uk

-Check out our stock of V8 parts for Rover-
-all prices include vat-

Features: *"FAST"* [USA] Distributor:

Self-contained electronic, adjustable vacuum advance & advance curve. Polished aluminium body. If you fit a performance camshaft then you will require a faster advance curve. Uses a black cap with male terminals. [like a spark plug].

Other Parts

Main stud set 3.5-4.2 ..... fr **£116.92**
Con-rod brg set 3.5-4.2 ..... fr **£19.68**
Con-rod brg set 4.0-4.6 ..... fr **£23.68**
Main brg set 3.5-4.2 ..... fr **£54.71**
Main brg set 4.0-4.6 ..... fr **£58.86**
Camshaft bearings ..... set **£31.07**
Piston rings-std/+.020" ..... fr **£35.48**
Pistons 3.5 +.020" 9.75 ..... set **£166.94**
Pistons 3.9 +.020" 8.13 ..... set **£84.48**
Pistons 3.9 +.020" 9.35 ..... set **£165.50**
Pistons 4.6 +.020" 9.35 ..... set **£156.32**
Timing set 3.5-4.2 metal cam gear .... fr **£41.48**
"FAST" electronic distributors ..... fr **£329.29**
Camshafts-various types ..... fr **£108.07**
Hydraulic lifters-set-same as OEM **£65.02**
Big-end bolt set HD ARP 3.5/4.2 ... fr **£90.31**
Adjustable pushrod set ..... fr **£217.94**
High volume o/p kit pre '76 ..... fr **£59.94**
Edelbrock 4brl inlet manifold ..... fr **£269.76**
Holley/Edelbrock Carbs ..... fr **£407.44**
Tubular exhaust manifolds ..... pr **£367.18**
Thermostat housing-Edel/Offe manif .. **£10.50**
4 barrel self tuning injection ..... fr **£1428.21gc**





Real Steel

Unit 9, Tomo Ind' Estate, Packet Boat Lane, Cowley, Middx, UB8 2JP
Tel: 01895 440505 Fax: 01895 422047
e-mail: sales@realsteel.co.uk
web: www.realsteel.co.uk

E&OE

Prices OK at 12-2-20 subject to change without notice; p&p extra

YRM
METAL SOLUTIONS
• ESTD 2008 •

£370 per side + P&P & VAT
Galvanised option £415 + P&P & VAT

These will fit all four and five door Defenders and Series





YRM 3288 & 3298
Brand new completed Side Frame Assembly, supplied as one piece
(JLR part no. ALR5314 & ALR5315)

These three components can also be supplied separately.
Ready to bolt and rivet in place.

We design and supply British, quality Land Rover spare parts using the finest materials and manufacturing techniques

Repair panels & body mounts for all Defenders, Series 2 & 3, Range Rover Classic, Discovery 1 & 2

Stainless Steel fixing kits

Gaskets & Foam Tape

Technical support and advice

Over 900 products online

We know you love your Land Rovers – so YRM it!

Contact us for more information on shipping costs

WWW.YRMIT.CO.UK • 01388 488150



Cybrand AEC's Jerry Darlington explains the Defender's new exhaust after-treatment to Ed Evans

Defender comes clean on emissions



TECHNICAL EDITOR
ED EVANS



Win, win

After covering 2000 miles with the SCR system installed, the Euro 6 Defender drives like any other 2.2-litre model, yet leaves a healthier environment in its wake.

Thanks to an independent developer, Defender TDCi goes Euro 6 compliant and emission zone friendly. Ed Evans reports

DEFENDER 2.2-litre diesel models built from 2011 onwards to the old Euro5 emissions requirements can now be upgraded to Euro 6 compliance. British-based Cybrand AEC's Defender-specific conversion service is a new development which has been available only since the beginning of February, and uses established exhaust treatment components developed and manufactured by the German emissions specialist, HJS.

For 2.2-litre diesel Defender drivers, this means the daily charge for entering urban Low Emissions Zones will no longer apply to their vehicles. It's a massive reprieve for the original shape Defender, especially as more towns and cities across the UK introduce their own low emission and clean air zones.

Cybrand AEC's Defender 90 development vehicle, equipped with the Euro 6-compliant technology, was submitted for Euro 6 emissions testing in January this year and gained full German type approval (applicable to EU countries and the UK). Orders for conversion were being taken from February 1.

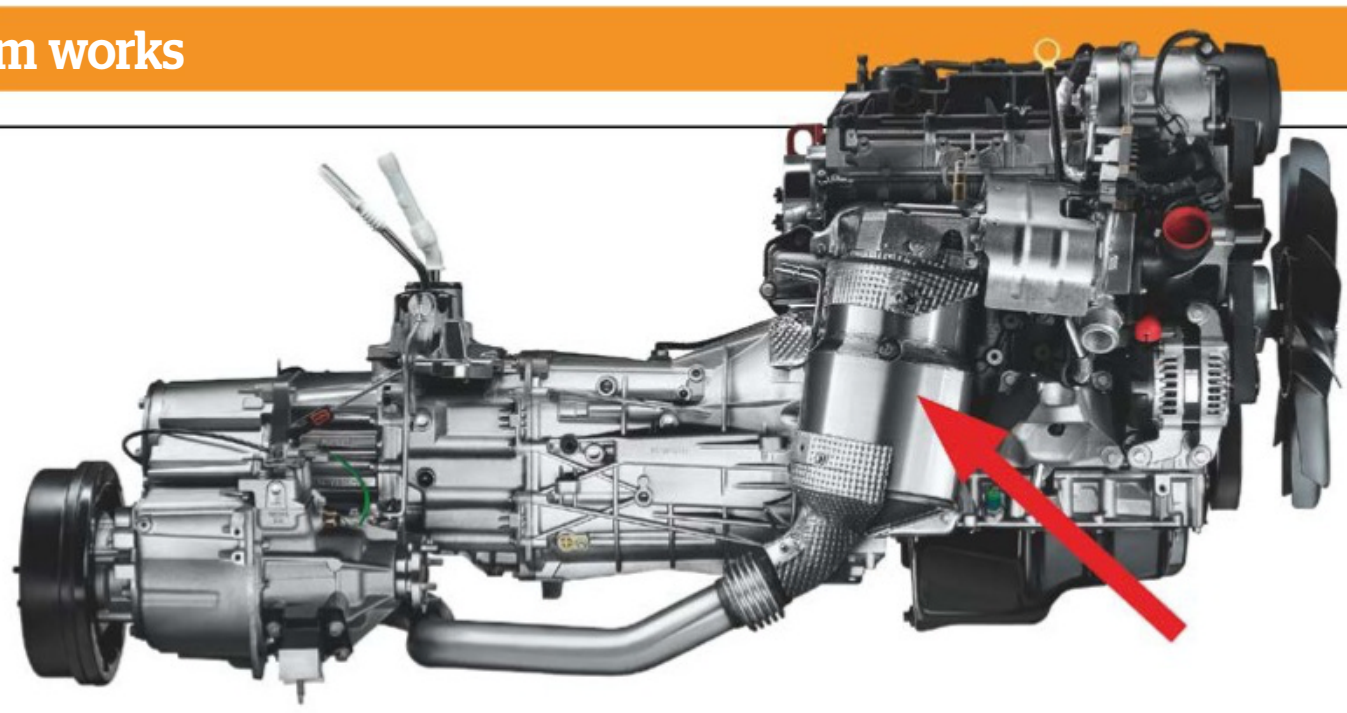
The Euro 6 Defender uses established technology known as Selective Catalytic Reduction (SCR). It works on the same principles as the SCR system fitted by Land Rover to all its diesel models from model year 2016 onwards. SCR reduces the harmful oxides of nitrogen (NOx) emitted from the tailpipe — the area in which the production Defender failed to meet Euro 6. Cybrand's installation is an addition to Defender's existing exhaust after-treatment which comprises a combined catalytic convertor and Diesel Particulate Filter (DPF) in the engine bay. The new Selective Catalytic Reduction system is located further downstream in the exhaust system, beneath the vehicle.

Developer, Jerry Darlington of Cybrand, explains that during Euro 6 Type Approval certification tests, the Defender achieved an 83 per cent reduction in NOx emissions. That comfortably exceeds the 55 per cent reduction demanded over the original Euro 5 spec.

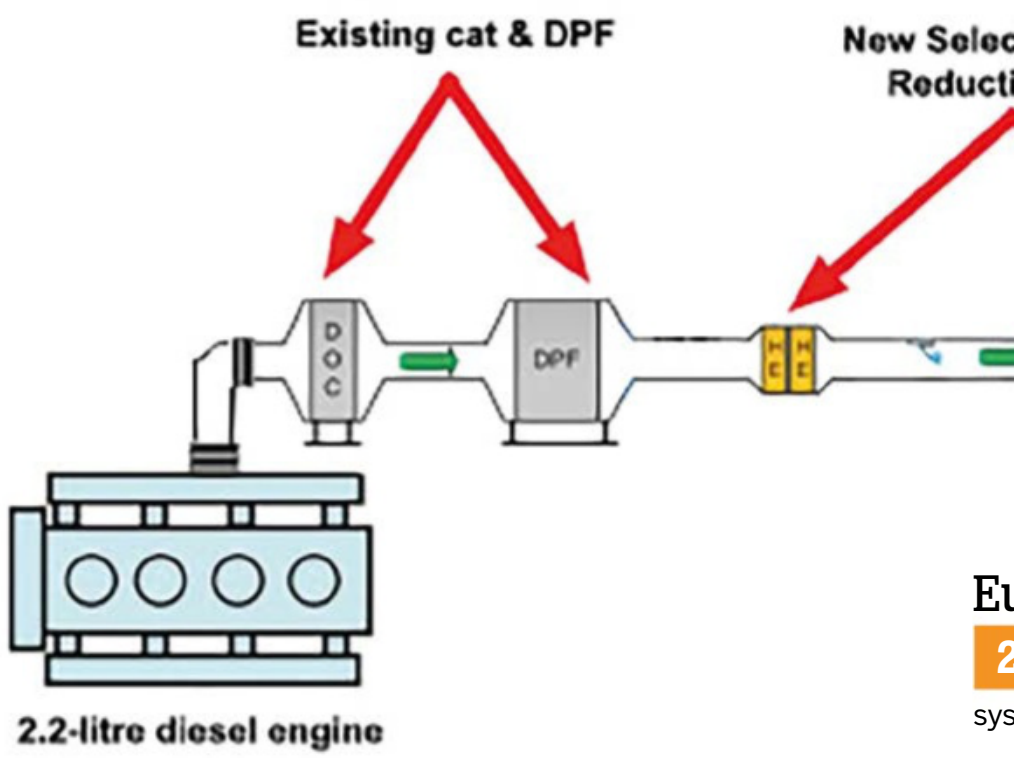
BRITPART

How the SCR system works

Existing exhaust treatment

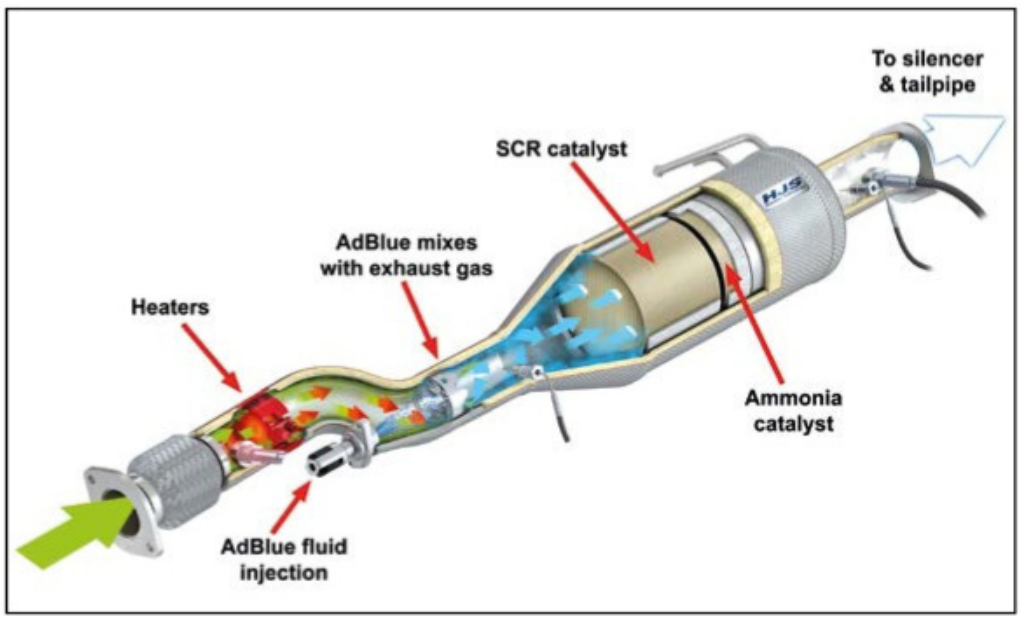


1 On the standard Euro 5 compliant Defender, exhaust gas from the turbocharger passes directly into the combined catalytic convertor and Diesel Particulate Filter (arrowed), and from there through the silencer to the tailpipe.



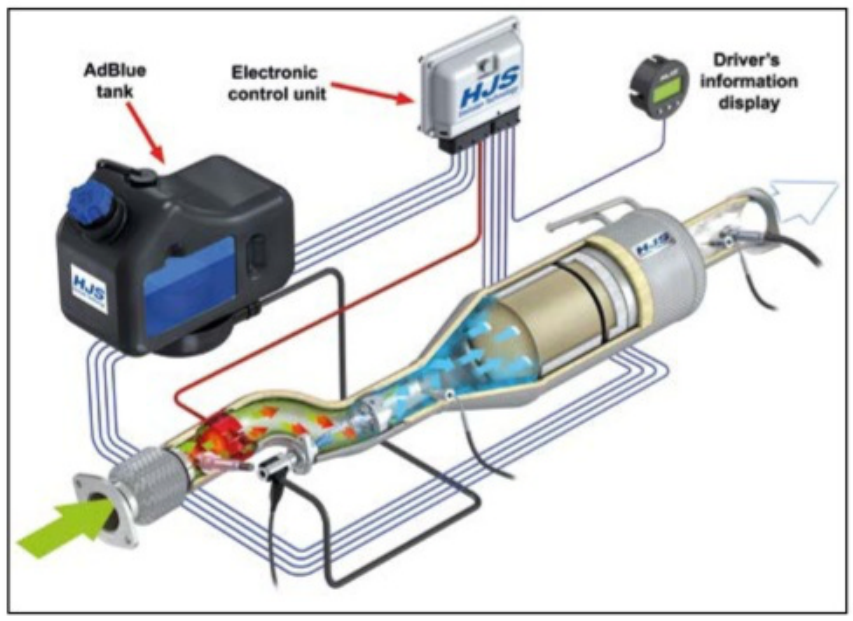
Euro 6 version

2 In this diagram, we see the engine and its combined catalytic convertor/DPF, but now the new SCR system is built into the exhaust system further downstream.



SCR in detail

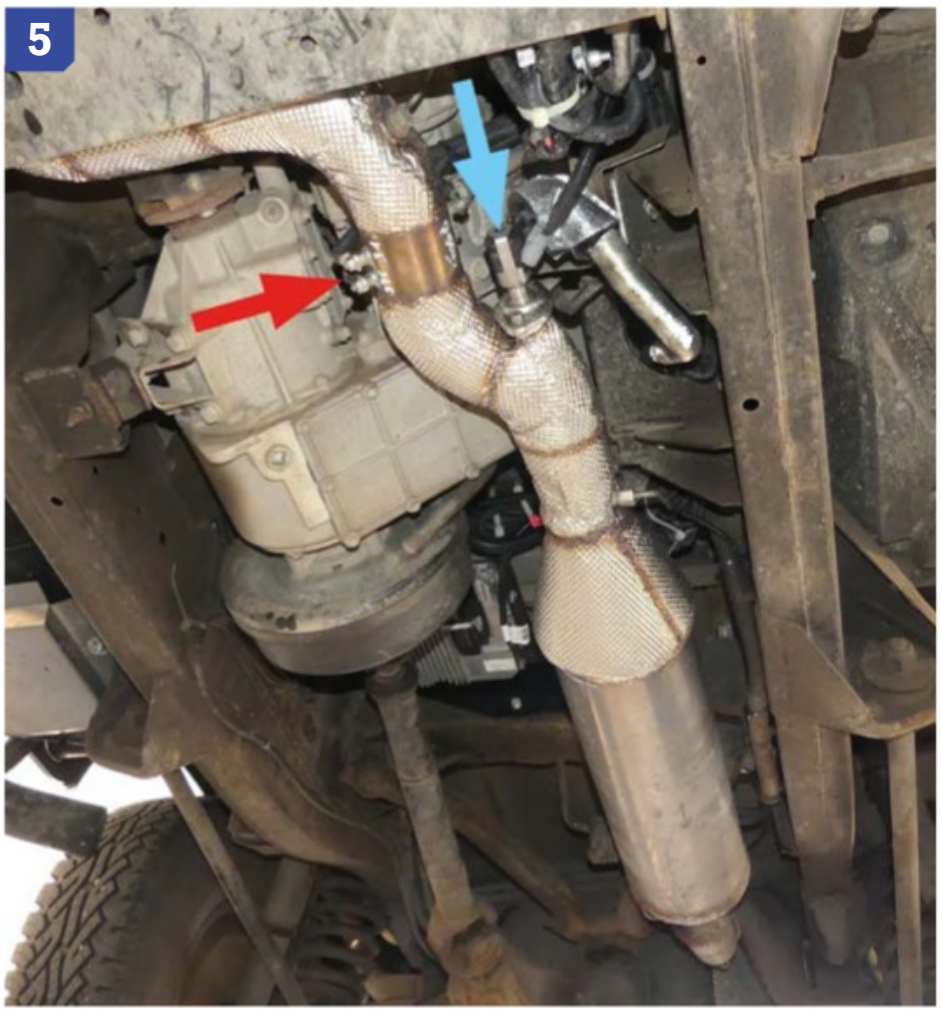
3 From left to right: exhaust from the existing cat and DPF enters the SCR system. The heaters (when needed) bring the exhaust to the ideal temperature for efficient catalytic conversion. AdBlue (diesel exhaust fluid) is injected into the gas flow and this works with the SCR catalyst to reduce the NOx level. Ammonia by-product is safely converted in the ammonia catalyst, and the cleaned exhaust passes to the silencer and tailpipe



Controlled and connected

4 The whole system is orchestrated by an electronic control unit sensing every stage of the SCR system, controlling the AdBlue injection and exhaust heater operation, and monitoring incoming and outgoing gas temperature and NOx content. The controller modulates the system according to engine running parameters, it monitors the level in the AdBlue tank and displays data on the driver's information panel.

The hardware





In the flesh

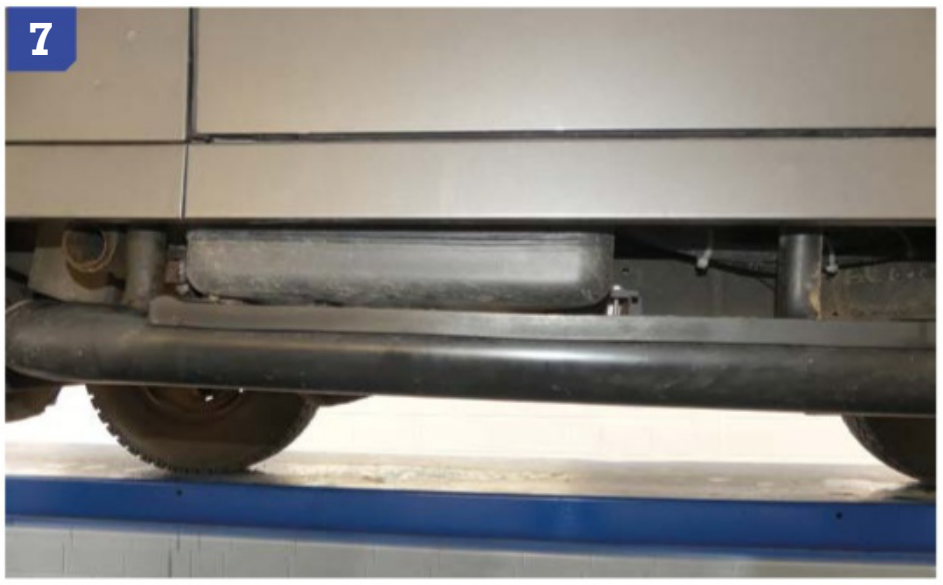
5 This is the real SCR system. At top left is the heater section (red arrow). Downstream from that is the AdBlue injector (blue arrow). After that, the pipework expands out to contain the catalytic convertors.

Heat and insulation

6 During cold engine starts, the heaters increase the exhaust gas temperature to the ideal conditions for catalytic conversion. They switch off when the engine is at working temperature.

Blended in

7 The AdBlue reservoir tank is installed underneath, below the driver's seat and looks similar to the side-mounted fuel tank on earlier 90 models.







Pumping station

8 The silver cover protects the AdBlue pump underneath the tank. A stainless steel drilled full tank guard is being developed for off-roaders.

Control unit

10 The ECU is safely stowed, high up under the floor. The system operates independently of any vehicle connections, save for one lead to the engine air flow meter.

BRITPART

Maintaining the system

THE only owner maintenance required is to occasionally top up the AdBlue fluid at the filler under the bonnet. The small SCR display panel in the cab warns the driver well in advance when a top-up will be due. Otherwise, the system is self-monitoring.



Information display

11 The SCR's small display unit can be sited to suit the driver. Here, it's attached to the left underside of the instrument panel, angled to the driver.



AdBlue

12 The AdBlue (diesel exhaust fluid) is topped up via this under-bonnet filling point, from where it's piped directly down to the tank under driver's seatbox.

Selectable info

13 The left/right buttons allow the driver to tab through a menu. Here, it displays remaining AdBlue range of 3418 km (2123 miles), suggesting a good mileage between top-ups.



2.4 TDCi Defender

Although the conversion is currently available only for the 2.2-litre Defender, Cybrand are currently developing a system for the earlier 2.4-litre (Euro 4 spec) model. This will involve the addition of a catalytic convertor/DPF in the downpipe (similar to the 2.2 layout), plus the additional SCR system downstream.

Converting your 2.2 Defender

CYBRAND AEC is currently setting up fully trained installation partnerships across the UK to fit and commission the new SCR system on customers' vehicles. The installed price is expected to be around £5000 plus VAT, depending on the hourly rates of your chosen installer.

The exhaust system will be completely renewed from just below the existing DPF in the engine bay, and includes a new silencer with piping and tailpipe. Any future maintenance or diagnostics can be carried out by the installer.

Warranty

THE complete conversion, including hardware components, software, control system and installation has a two-year warranty from Cybrand AEC Ltd.

Emission zone charges

CYBRAND AEC has gained Type Approval for the Defender with SCR system. When your vehicle is converted they will send the appropriate documentation to the UK Vehicle Certification Agency (VCA). So, for example, Transport for London would be automatically notified that your registration plate refers to a Euro 6 compliant vehicle. Thus, it would not be identified for a penalty charge in that emissions zone. As other towns and cities introduce their own zones, data requested from VCA would exempt your Euro 6 vehicle.

Re-mapped and tuned engines

AS we said earlier, the SCR system operates independently of the vehicle's own systems and ECUs, and it works purely by sensing the temperature and NOx content of the exhaust gas. So it automatically adjusts to the effects of existing and future re-maps and other engine modifications, modulating the gas heating and AdBlue dosage according to the temperature and NOx content sensed upstream of the SCR system.

Benefits

IN addition to making the Defender acceptable to towns and cities with emission zones, the vehicle will be producing fewer harmful pollutants wherever it is driven, which is a benefit to all. And with growing interest in making pre-Euro 6 Land Rovers more environmentally friendly, the re-sale value may be enhanced.

Contact: Cybrand AEC Ltd. cybrand.co.uk
Email: sales@cybrand.co.uk

We told you so!

Buyers heed LRM's warning of Disco Sport and Range Rover Evoque oil dilution problems – secondhand sales slump as a result, reports Dave Phillips

LIKE most journalists, I like to think that I make a difference; that my rambling jottings in this column help readers to know what to buy and, just as important, what to avoid.

I am, therefore, delighted that LRM's campaign over the last six months to warn you about the risk of investing in diesel Discovery Sport and Range Rover Evoque models with Ingenium diesel engines has resulted in a sales slump of the affected models.

To illustrate the point, I've just taken two screengrabs from the AutoTrader website, which show how pre-2016 examples of both models (when they were equipped with the reliable 2.2 Ford-derived diesel engines) are now fetching higher prices than newer Ingenium models.

The most dramatic of the screengrabs is the two Discovery Sport adverts. Both have an £18,000-plus asking price.

The top one is a 2015 model with three previous owners and a whopping 85,612 miles on the clock. The bottom one is two years newer (2017), with just one owner and a mere 11,402 miles on the clock.

Both come from dealers about the same distance from my home (34 and 40 miles, respectively). The asking price is about the same. Yet one is two years newer, has only one owner and about one-eighth the mileage of the other. How can that be?

The reason for this is that the 2015 model is fitted with the reliable Ford 2.2-litre diesel, while the 2017 car has that troublesome 2.0-litre Ingenium diesel, which because it has been fitted transversely under the bonnet, suffered epic oil dilution problems, due to the diesel particulate filter (DPF) being fitted too far away from the engine to be effective except on long, fast motorway conditions. Typically short or stop-start journeys resulted in unburnt diesel entering the sump and diluting the engine oil to levels likely to cause engine damage.

I hasten to add that there is nothing wrong with any of the excellent Ingenium engines themselves, as long as they are fitted in a position that allows the DPF to be close-coupled. In the restricted engine compartments of the Disco Sport and Evoque, this wasn't possible. One of my informants who helped me break this story claimed that JLR's engineers had warned of the problem but their concerns were ignored by the design team, who refused to contemplate changing the design of the bulkhead to accommodate the DPF. If this is so, they should be ashamed.

The difference between the two Evoques on the second screengrab is also dramatic, with a 2013 Ford-engined example with almost 77,000 miles on the clock subject to an asking price higher than a 2016 model with one owner, 58,000 miles... and that Ingenium engine.

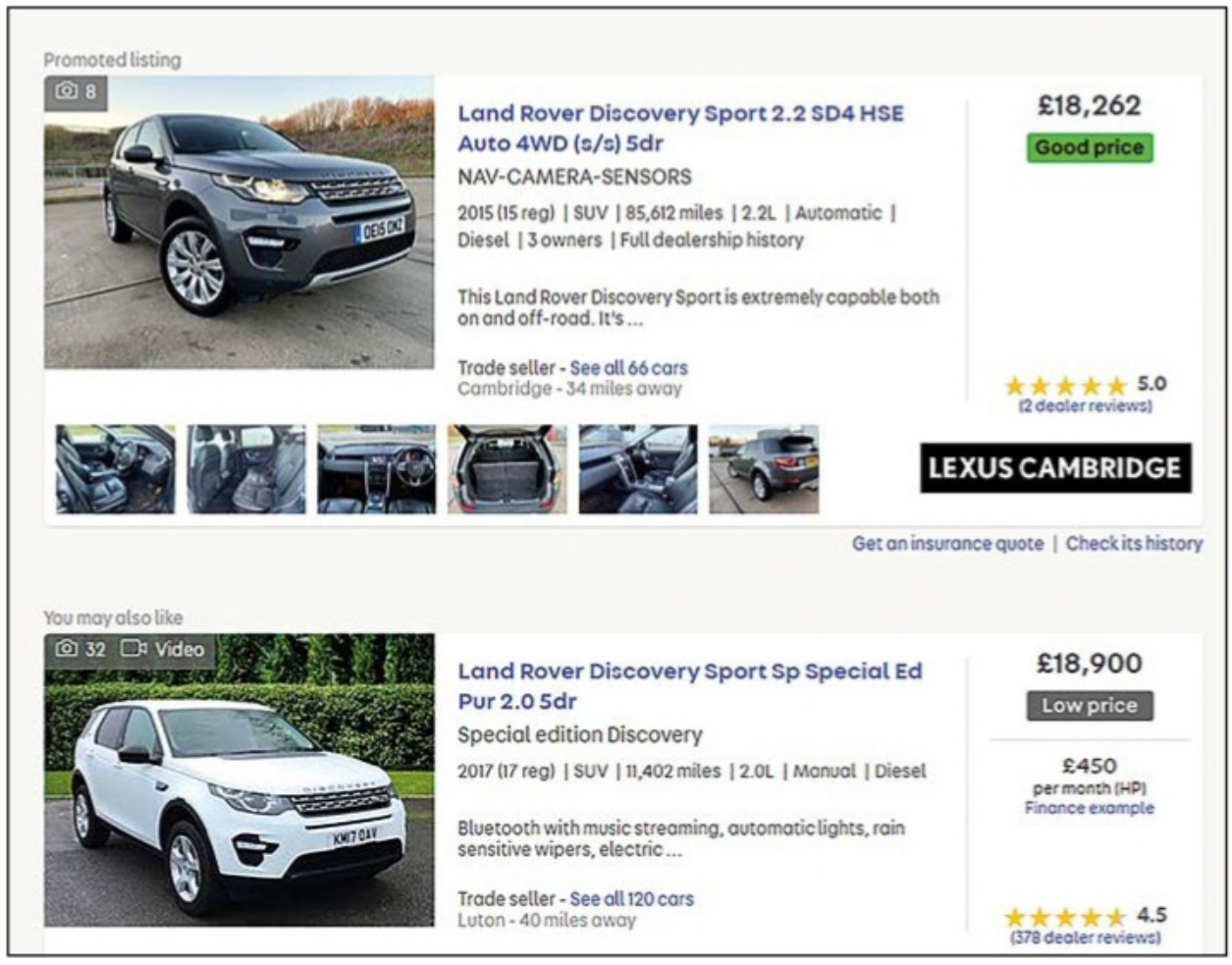
So, the advice remains the same: beware of post-2016 Discovery Sport and Range Rover Evoque models.

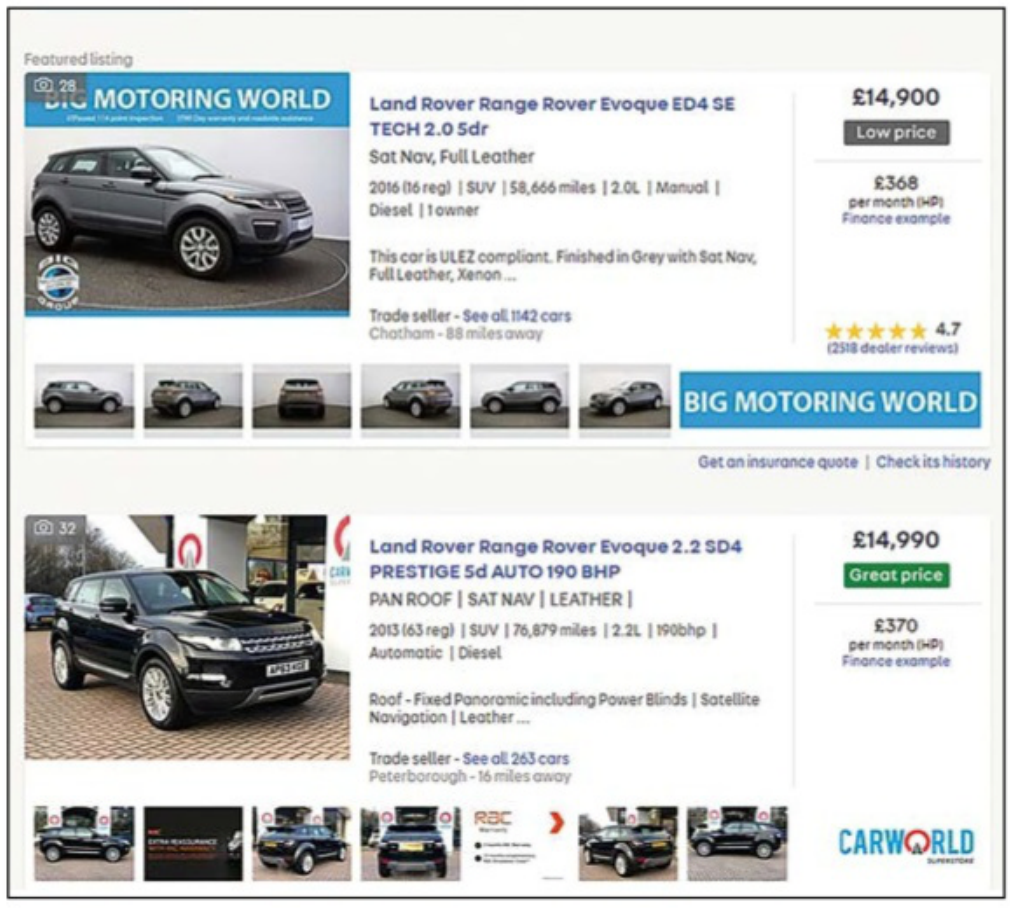
Changing tack slightly, eagle-eyed readers will have noticed that the asking price of secondhand Evoques is about £4000 lower than that of Discovery Sports, despite the fact that the differential would have been the opposite way round when both models were new.

This, of course, is because the Evoque has since been superseded by a new model, while an all-new Disco Sport is still a year or two away.

But what this does mean is that anyone thinking of buying a pre-2016 Disco Sport might as well go for an Evoque instead. Both vehicles share engines and drivetrains, but the Evoque is better appointed and, because it was launched back in 2011 — four years before the Disco Sport — there are a lot more secondhand models to choose from.

In the meantime, stick with LRM for the very best Land Rover buying advice.





Above: Two Disco models, both with an £18,000-plus price tag. One a 2015 model, with over 85k on the clock, the other 2017 with 11k. Guess which one has the 2.0 Ingenium diesel engine?

Left: It's the same story with secondhand RR Evoques... but they are better value than Disco Sports

THE LATEST PRICES
UPDATED EVERY MONTH



EARLY SERIES I

80", 1948 to 1953

THIS IS the ultimate classic Land Rover – 72 years old and more desirable than ever. The early 80-inch models fetch the highest prices. The earlier and more original, the better. Pre-production and historic examples are the most sought-after, and 1948-50 models the most expensive. Even barn-find derelicts are in demand for restoration projects. The Holy Grail of all Land Rovers is the missing centre-steer prototype from 1947 – if it still exists.

BUYER'S TIP: Join the Series One Club for parts and advice.

SPECIFICATIONS

1948-1951: 1.6-litre four-cylinder petrol, 55 bhp, 83 lb-ft torque. Four-speed manual, two-speed transfer box with permanent four-wheel drive (to 1950), later selectable. **1951-1953:** 2.0-litre four-cylinder petrol engine, 52 bhp, 101 lb-ft.

PRICE GUIDE

Poor: £3000 – £6500
Average: £6500 – £7500
Good: £7500 – £19,000
Excellent: £19,000 – £60,000



LATER SERIES I

86"/107"/88"/109", 1953 to 1958

THERE IS such a thing as a sensibly-priced Series I. The later models are better value than their early counterparts, as well as being more user-friendly and easier to drive. The distinctive 107-inch Station Wagons are extremely sought-after, and fetch the highest prices, while the long wheelbase pick-ups represent the best value. Check any prospective purchase for serious corrosion issues – an inherent problem with all early (and many later) Land Rovers.

BUYER'S TIP: Better everyday drivers than the 80-inch.

SPECIFICATIONS

1953-1957: 2.0-litre four-cylinder petrol engine, 52 bhp, 101 lb-ft torque. Also, **FROM 1957,** 2.0-litre four-cylinder diesel, 52 bhp, 87 lb-ft torque. Four-speed manual, two-speed transfer box with selectable four-wheel drive.

PRICE GUIDE

Poor: £2000 – £4000
Average: £4000 – £6000
Good: £6000 – £10,000
Excellent: £10,000 – £38,000



SERIES II/SERIES IIA

88" AND 109", 1958 to 1971

THE LAUNCH of the Series II in 1958 saw the arrival of the classic Land Rover shape that endured through to the 2016 Defender. Values of SIIs are rising – early MoT-exempt models especially. Some have been retro-fitted with Tdi engines, which help them keep up with modern traffic. A SII should be a good ride. If it isn't, check the leaf springs aren't badly rusted and seized – and consider replacing with more forgiving parabolics.

BUYER'S TIP: Affordable classic that holds its value.

SPECIFICATIONS

1958: 88s, diesels to 1961 and all transmissions same as Series I. **1958-1971:** 2.25-litre four-cylinder petrol, 77 bhp, 124 lb-ft torque; 2.25-litre four-cylinder diesel, 62 bhp, 103 lb-ft torque. **1967-1971** (109 only): 2.6-litre six-cylinder petrol, 81 bhp, 132 lb-ft torque.

PRICE GUIDE

Poor: £1500 – £2300
Average: £2300 – £4000
Good: £4000 – £6000
Excellent: £6000 – £15,000



MILITARY LIGHTWEIGHT

88" SERIES II and SIII, 1968 to 1984

STAND TO attention! There's no messing with the tough, no-nonsense military version of the leaf-sprung Land Rover, built for the armed forces. In 1972 the military Series III got the same mechanical upgrades as the civilian model, including a five-bearing petrol engine and improved gearbox with synchromesh on all forward gears, and an alternator replaced the dynamo. Like all military Land Rovers, Lightweights are in demand with enthusiasts, so good ones fetch serious money.

BUYER'S TIP: Great fun in the summer.

SPECIFICATIONS

1968-1984: 2.25 petrol/diesel and transmissions as Series II and Series III.

PRICE GUIDE

Poor: £2000 – £3000
Average: £3000 – £6000
Good: £6000 – £7000
Excellent: £7000 – £18,000



RANGE ROVER 1 (CLASSIC)

1970 to 1996

EARLY THREE-DOOR examples command serious money and rarity, and classic car collectors are pushing prices up even further. But severe rust is the biggest enemy and the rarer parts are getting difficult to source. V8s are expensive to run, but the later Tdi diesels are reasonably frugal. Later models in good nick have been steadily rising in recent years, with high-spec versions like the Vogue SE or 4.2 LSE the most desirable.

BUYER'S TIP: Early three-doors fetch the most money.

SPECIFICATIONS

1971-1983: 3.5-litre V8, 125 bhp, 185 lb-ft torque. 1986-on 3.5 EFi: 165 bhp, 206 lb-ft. **1989-1996:** 3.9 EFi V8, 185 bhp, 235 lb-ft or 4.2-litre, 200 bhp. **1986-1992:** 2.4 VM turbo diesel, 112 bhp, 183 lb-ft, later 119 bhp 2.5.

PRICE GUIDE

Poor: £1000 – £2500
Average: £2500 – £5000
Good: £5000 – £7000
Excellent: £7000 – £50,000



SERIES III

88" AND 109", 1971 TO 1985

IF YOU'RE looking for a leaf-sprung Land Rover for a sensible price, the Series III is your answer. The collectability of SIIIs means they are no longer cheap as chips, but you can still find sensibly-priced examples. Parts are reasonably priced and readily available. The simplicity of the design makes them ideal for the home mechanic. Tidy originals command higher prices. The Stage One V8 is particularly sought-after. Look after your Series III and it will hold its value. Diesels dull.

BUYER'S TIP: Definitely worth investing.

SPECIFICATIONS

1971-1985: 2.25 petrol/diesel and transmissions as Series IIA, 2.6 six-cylinder produced up to 1979. **1979-1985:** Stage One (109 only) 3.5-litre V8 petrol, 91 bhp, 166 lb-ft torque. LT95 four-speed manual with permanent 4WD.

PRICE GUIDE

Poor: £1000 – £2000
Average: £2000 – £4500
Good: £4500 – £6000
Excellent: £6000 – £12,000



FORWARD CONTROLS

SERIES IIA, IIB – 1962 TO 1972; 101 – 1972 TO 1978

THESE ARE Land Rover's real-life monster trucks. Series IIA and IIB models had big-capacity load areas, but were blighted by under-powered engines. The later 101 Forward Control was a big military truck with a V8 petrol, thirstier than Oliver Reed at opening time. Some parts can be hard to find, but there's fantastic back-up from clubs, with loads of fellow enthusiasts. They certainly stand out from the crowd.

BUYER'S TIP: Do you have room for one on your drive?

SPECIFICATIONS

1962-1972: 2.6-litre six-cylinder petrol (SIIA/IIB), 81 bhp, 132 lb-ft torque. **1972-1978:** 3.5-litre V8 petrol (101), 128 bhp, 185 lb-ft torque. Four-speed LT95 gearbox with permanent four-wheel drive.

PRICE GUIDE

Poor: £2700 – £3700
Average: £3700 – £6700
Good: £6700 – £8000
Excellent: £8000 – £14,000



NINETY/ONE TEN

1983 TO 1990

DEFENDERS IN all but name, the first coil-sprung utilities gave you the choice of a sluggish diesel or a thirsty petrol V8 until the unreliable 85 bhp turbodiesel arrived in 1986. Many – perhaps most – have now been retro-fitted with later Tdi engines, which makes sense. Good ones defy the years and there's no shortage of spares. Prices are rising, not least because original examples over 25 years old can be exported to the USA.

BUYER'S TIP: Great value Defender precursors.

SPECIFICATIONS

1983-1985: Engines as Series III/ Stage One V8. LT77 five-speed fitted to four-cylinder models. **1985-1990:** 2.5-litre petrol, 80 bhp, 129 lb-ft torque; 2.5 diesel, 68 bhp, 113 lb-ft; 3.5 V8 petrol, 113 bhp, 185 lb-ft, 134 bhp from 1986. LT85 five-speed fitted to V8 models.

PRICE GUIDE

Poor: £4000 – £5000
Average: £5000 – £6000
Good: £6000 – £8000
Excellent: £8000 – £13,000



DISCOVERY 1

200TDI/300TDI/V8, 1990 to 1998

AFTER years of rock-bottom prices, values for good ones are now climbing. But the Disco 1 is still very affordable. It is capable off-road and refined too, but catastrophic body rust is a massive problem. Check out the floor, sills and inner wings and be prepared to get welding. Aftermarket panels cheap. If regularly serviced, 200Tdi and 300Tdi engines are pretty bulletproof. Early models now being snapped up by collectors..

BUYER'S TIP: Rust is the enemy, but parts are cheap.

SPECIFICATIONS

1989-1994: (200Tdi) 2.5-litre turbo diesel, 111 bhp, 195 lb-ft torque. LT77S five-speed transmission. **1994-1998:** (300Tdi) 2.5-litre turbo diesel, 111 bhp, 195 lb-ft torque. R380 five-speed transmission.V8s as Range Rover Classic.

PRICE GUIDE

Poor: £800 – £1000
Average: £1000 – £2500
Good: £2500 – £4500
Excellent: £4500 – £8000



DEFENDER Tdi

200TDI/300TDI, 1990 to 1998

LAND ROVER workhorses were underpowered until the advent of the Tdi diesels. The 200Tdi was fitted from 1990 to 1994 and was superceded by the 300Tdi, which shared the same power and torque figures but was slightly more refined. This was the beginning of the golden era of Defenders and many would argue these were the greatest vehicles ever built. There has been a steady supply of serviceable engines and gearboxes from terminally-rusted and scrapped Discoverys of the same era, although they are now getting scarcer.

BUYER'S TIP: Grab one while you can.

SPECIFICATIONS

2.5-litre turbocharged, direct-injection diesel, 107 bhp, 195 lb-ft torque. LT77S (200Tdi) or R380 (300Tdi) five-speed transmission.

PRICE GUIDE

Poor: £4000 – £5000
Average: £5000 – £7000
Good: £7000 – £9000
Excellent: £9000 – £17,000



RANGE ROVER 2 (P38A)

1994 to 2002

BETTER THAN some would have you believe, the second-generation Range Rover's reputation for unreliability is sometimes undeserved. For a luxury 4x4, prices are very low. No serious rust issues to speak of and if you are handy with electrics and a laptop computer, you can use diagnostic software to solve most problems. Replacement parts can be pricey though. The diesel option is a BMW six-pot turbo. V8 petrols are thirsty.

BUYER'S TIP: 1990s luxury for not much money.

SPECIFICATIONS: 4.0: 4.0-litre V8 petrol, 185 bhp, 235 lb-ft torque. 4.6: 4.6-litre V8 petrol, 225 bhp, 277 lb-ft torque. 2.5: 2.5-litre six-cylinder turbo diesel, 134 bhp, 199 lb-ft torque. R380 manual or ZF four-speed auto, permanent four-wheel drive.

PRICE GUIDE:
Poor: £500 – £900;
Average: £900 – £1800
Good: £1800 – £3100
Excellent: £3100 – £6000



FREELANDER 1

1997 to 2006

AN AFFORDABLE entry-level Land Rover, and popular as ever. The 1.8-litre petrol engines can be troublesome and best avoided. The early diesels are economical, mechanically simple and reliable if properly serviced (and timing belts regularly renewed). The later Td4 is chain-driven, more or less bulletproof and the best choice. The Freelander has no rust issues to worry about. Great value.

BUYER'S TIP: Td4 diesels good for 200,000-plus miles.

SPECIFICATIONS
1997-2000: 1.8-litre four-cylinder petrol, 118 bhp, 121 lb-ft; 2.5-litre V6 petrol, 177 bhp, 177 lb-ft torque; 2.0-litre Rover four-cylinder turbodiesel, 96 bhp, 155 lb-ft torque. R380 five-speed transmission. **2000-2006:** 2.0-litre BMW Td4, 110 bhp, 192 lb-ft.

PRICE GUIDE
Poor: £400 – £900
Average: £900 – £2000
Good: £2000 – £3000
Excellent: £3000 – £5000



DISCOVERY 2

1998 to 2004

THE DISCOVERY 2 retained the stepped-roof looks and basic shape of its predecessor, but got an improved bodyshell and suspension, along with new engines and axles. It was the best-handling Land Rover in its day and there are plenty to choose from even now. V8 petrols are expensive to run, while as you might expect Td5 diesels are economical. The bodies last well, but the chassis is prone to spectacular levels of rust – putting some examples beyond economic repair.

BUYER'S TIP: Invest in a galvanised chassis and you've got a Disco for life.

SPECIFICATIONS
2.5-litre five-cylinder turbodiesel (Td5), 122 bhp, 221 lb-ft torque; 4.0-litre V8 petrol, 185 bhp, 235 lb-ft torque. R380 manual or ZF four-speed auto, permanent four-wheel drive.

PRICE GUIDE
Poor: £900 – £1500
Average: £1500 – £2500
Good: £2500 – £3500
Excellent: £3500 – £6000



DEFENDER Td5

1998 to 2007

THE FIVE-CYLINDER Td5 was the last Land Rover-derived diesel engine and it has proved pretty bulletproof over the years, provided it has been properly serviced. Now in great demand as prices for all Defenders steadily rise. There's a good number of special editions to choose from and, if you are looking for a utility vehicle, a healthy number of truck cabs and hard-tops are always on sale. Rear crossmembers prone to rust, but easily replaced. There is a growing supply of Td5 engines from Discovery 2s that are being scrapped due to serious rust issues. Non-OEM parts cheap.

BUYER'S TIP: Check service history.

SPECIFICATIONS
2.5-litre five-cylinder turbo diesel, 122 bhp, 221 lb-ft torque. R380 five-speed transmission, permanent four-wheel drive.

PRICE GUIDE
Poor: £5000 – £6000
Average: £6000 – £8000
Good: £8000 – £9800
Excellent: £9800 – £18,000



RANGE ROVER 3 (L322) 2002 to 2012

EARLY THIRD-GENERATION Range Rovers are now over 15 years old and can be picked up cheap, but don't underestimate the running costs – especially from petrol V8s. The diesel Td6 is less thirsty. Drivetrain and electrical faults are common, but the biggest problem is previous owners who have skimped on servicing and repairs and run them into the ground. Buy a neglected L322 and you're asking for trouble. When L322s start to go wrong, they get very expensive to put right and parts aren't cheap, either.

BUYER'S TIP: Prices falling, but beware of the dogs.

SPECIFICATIONS
2002-2005: 4.4-litre BMW V8 petrol, 282 bhp, 325 lb-ft torque. **2002-2007:** 3.0-litre BMW Td6 turbodiesel, 177 bhp, 287 lb-ft torque.

PRICE GUIDE
Poor: £1000 – £2500
Average: £2500 – £4000
Good: £4000 – £6000
Excellent: £6000 – £10,000



RANGE ROVER SPORT 1 2005 to 2013

THE SPORT fulfils the fast premium 4x4 segment with style. It shares the same platform as the Discovery 3/4 and is just as impressive off-road. A great long-distance cruiser and entertaining on the right roads. If you need a load-lugger though, the more versatile Discovery is better. Tyres, brakes and suspension tend to have a hard time, so buy carefully. Despite being replaced by the second-generation Sport, early models are still popular. But are they beginning to look a bit dated?

BUYER'S TIP: Values slowly falling. Be prepared to haggle.

SPECIFICATIONS
2005-2009: 2.7-litre V6 turbodiesel, 190 bhp, 324 lb-ft. 4.4-litre V8 petrol, 300 bhp, 313 lb-ft; Supercharged V8 390 bhp, 406 lb-ft. **2009-on:** 3.0-litre V6 diesel, 244 bhp, 442 lb-ft; 3.6-litre TDV8 diesel, 272 bhp, 472 lb-ft.

PRICE GUIDE
Poor: £4000 – £6500
Average: £6500 – £7700
Good: £7700 – £10,000
Excellent: £10,000 – £20,000



FREELANDER 2

2006 to 2015

A BIG improvement on Freelander 1. The towing capacity is just 2000 kg compared with the 3500 kg of bigger Land Rovers, but it's a worthy alternative to a Discovery. Lack of low-range and ground clearance prevents hardcore off-roading, but it is certainly still competent in the rough. Reasonable on fuel and with a decent-sized boot, too, there are no rust issues and it's ultra-reliable. Residual values are falling now it has been superseded by Discovery Sport, so it's a bit of a bargain.

BUYER'S TIP: An economical and trouble-free buy.

SPECIFICATIONS
2.2-litre four-cylinder turbo-diesel, 150 bhp, 295 lb-ft torque. Six-speed manual gearbox with optional stop/start (eD4) or six-speed automatic. Permanent four-wheel drive.

PRICE GUIDE
Poor: £2900 – £4000
Average: £4000 – £7000
Good: £7000 – £8700
Excellent: £8700 – £12,000



DEFENDER TDCi

2007 to 2016

FOUR-CYLINDER FORD TDCi turbo-diesel (shared with the Transit van) matched to a six-speed gearbox and an all-new dashboard were all part of 2007's major revamp. The loss of the hinged front air vents and the distinctive humped bonnet aren't to everyone's taste, but the brilliant off-road ability remains. The original 2.4-litre engine was replaced in 2012 with a new 2.2-litre unit with better emissions.

Production ended in 2016 and an all-new model has recently been introduced.

BUYER'S TIP: Demand – and values – remain high as ever.

SPECIFICATIONS
2007-2012: 2.4-litre four-cylinder turbodiesel, 122 bhp, 221 lb-ft torque. **2012-on:** 2.2-litre four-cylinder turbo diesel, 122 bhp, 265 lb-ft torque. Six-speed MT85 gearbox, permanent four-wheel drive.

PRICE GUIDE
Poor: £6500 – £8500
Average: £8500 – £11,500
Good: £11,500 – £18,000
Excellent: £18,000 – £50,000



RANGE ROVER EVOQUE 1 2011 to 2018

NOT A favourite with Land Rover enthusiasts, but a huge hit with the general public who have turned it into the brand's best-selling model. 2WD is more economical, but 4WD is the better performer, and it's not bad off-road. Launched in 2011, there are lots available on the market – and some real bargains. The Evoque was updated for 2015, with styling tweaks and cleaner engines, and a convertible version arrived in 2016.

BUYER'S TIP: Problems with oil dilution on some diesel models.

SPECIFICATIONS
2.0-litre eD4 turbodiesel, 150 bhp, 280 lb-ft; 2.0-litre TD4 turbodiesel, 180 bhp, 317 lb-ft; 2.0-litre SD4 turbodiesel, 240hp, 369 lb-ft; 2.0-litre Si14 petrol, 240 bhp and 290 bhp, 251 lb-ft and 295 lb-ft. Six-speed manual or nine-speed auto. 2WD or 4WD.

PRICE GUIDE
Poor: £7500 – £11,000
Average: £11,000 – £14,000
Good: £14,000 – £18,000
Excellent: £18,000 – £40,000



RANGE ROVER 4 (L405)

2012 to present

WITH its aluminium chassis, the fourth-generation Range Rover is 420 kg lighter than its predecessor. Coupled with efficient new diesel engines, it's more frugal than any previous Rangie, too. It's all comparative though... Taking depreciation into account, it will be several years before secondhand models offer economical motoring. Make no mistake about it: this is a car for all the well-heeled.

BUYER'S TIP: A lot of car – for a lot of money.

SPECIFICATIONS
3.0-litre TDV6 turbodiesel, 258 bhp, 440 lb-ft; 4.4-litre SDV8 turbodiesel, 339 bhp, 472 lb-ft; 2.0-litre P400e petrol PHEV, 404 bhp, 472 lb-ft; 3.0-litre V6 s/c petrol 340 bhp, 332 lb-ft; 5.0-litre V8 s/c petrol, 525 bhp & 565 bhp, 461 lb-ft & 516 lb-ft. Eight-speed automatic gearbox.

PRICE GUIDE
Poor: £20,000 – £39,000
Average: £39,000 – £45,000
Good: £45,000 – £50,000
Excellent: £50,000 – £150,000

WHAT'S HOT THIS MONTH...



DISCOVERY 3 / 4

2004 to 2017

THEY LOOK identical at first glance, but under the skin the third and fourth-generation Discoverys are very different. Early D3s suffered reliability issues, caused by water ingress into the electrics, but D4s are pretty bulletproof. No rust issues. Hugely capacious and versatile family cars, capable of seating seven. They have won countless awards for best tow car and look as stylish as ever. Gaining in popularity with enthusiasts now Defenders are getting so expensive.

BUYER'S TIP: Great value for money but parts can be expensive. Values falling.

SPECIFICATIONS

2.7-litre V6 turbo-diesel, 190bhp, 324 lb-ft torque. 4.4-litre V8 petrol, 300bhp, 313 lb-ft. 3.0-litre V6 turbo-diesel, 244 bhp, 442 lb-ft torque.

PRICE GUIDE

Poor: £2900 – £4500
Average: £4500 – £8000
Good: £8000 – £12,000
Excellent: £12,000 – £34,000



RANGE ROVER CLASSIC 4 DOOR

Looking as good today as it did when launched, half a century ago. Any Range Rover Classic is timeless, but inspect thoroughly for severe body rust



RANGE ROVER SPORT 2

2013 to present

ALTHOUGH THE Range Rover Sport 2 is now cascading down to the secondhand market, a new one may prove a tempting purchase for those considering buying a secondhand Range Rover 4. It is £20k cheaper, and performance, handling and economy are all better than its big brother. Brilliant off-road, but unlikely to see much mud. It has a reputation for great reliability too.

BUYER'S TIP: Not cheap.

SPECIFICATIONS

SDV6: 3.0-litre, diesel; SDV8: 4.4-litre 339hp, diesel; P300: 2.0-litre 300hp, petrol; P400e: 2.0-litre 404hp, petrol PHEV; P400: 3.0-litre, 400hp, petrol; P525: 5.0-litre, V8, 525hp, supercharged petrol; P575: 5.0-litre V8 575hp, supercharged petrol. Eight-speed automatic gearbox.

PRICE GUIDE

Poor: £19,000 – £29,000
Average: £29,000 – £41,000
Good: £41,000 – £50,000
Excellent: £50,000 – £100,000



DISCOVERY SPORT

2015 to present

WHILE ON paper it replaces the Freelander 2, in reality the Discovery Sport is a very different beast altogether. Like all Land Rovers, it's built to be best in class off-road, but its on-road handling is astonishing, too. Its sure-footed handling on icy roads is nothing short of astonishing. Considering all the new cutting-edge technology, this versatile mid-size SUV represents excellent value for money, but 2016 model-year Ingenium diesels can suffer oil dilution problems.

BUYER'S TIP: Problems with oil dilution on some diesel models.

SPECIFICATIONS

2.0-litre eD4/TD4/SD4 turbodiesel, 148, 178 & 237 bhp, 280, 317 and 369 lb-ft; 2.0-litre petrol, 238 bhp, 251 lb-ft; 2.0-litre Si4 petrol 286 bhp and 295 lb-ft. Six-speed manual and nine-speed automatic gearboxes.

PRICE GUIDE

Poor: £13,000 – £17,000
Average: £17,000 – £22,000
Good: £22,000 – £29,000
Excellent: £29,000 – £48,000



DISCOVERY

2017 to present

THE FIFTH-GENERATION Discovery doesn't get a number after its name, but there's no mistaking what it is with its striking new looks (which have ruffled a few feathers). It is also more capable, on- and off-road, than any of its predecessors as well as more economical to run thanks in part to the new JLR Ingenium series of engines. We have no doubt that it will be winning a lot of awards for the best tow car, just like its predecessors.

BUYER'S TIP: Still arguably the most versatile Land Rover.

SPECIFICATIONS

2.0-litre SD4 turbodiesel, 240 bhp, 369 lb-ft; 3.0-litre Td6 diesel, 258 bhp, 443 lb-ft; 2.0-litre I4 petrol, 296 bhp, 332 lb-ft; 3.0-litre Si6 s/c petrol, 340 bhp, 332 lb-ft. Eight-speed automatic gearbox.

PRICE GUIDE

Poor: N/A
Average: N/A
Good: N/A
Excellent: £36,000 – £45,000
New: £43,495 – £65,995



RANGE ROVER VELAR

2017 to present

THE LATEST addition to the Land Rover family is yet another Range Rover. Solihull spotted a very small gap between the Evoque and the Sport, and the Velar has been was squeezed into it. This probably isn't the sort of car you would risk at a weekend's pay and play off-road course, but if you did you might be surprised at its ability. There's a lot of tech packaged into this luxury model, but it doesn't come cheap.

BUYER'S TIP: This is definitely one to impress the neighbours.

SPECIFICATIONS

2.0-litre turbodiesel, 180 bhp, 240 bhp & 300 bhp, 317 lb-ft, 369 lb-ft & 516 lb-ft. 2.0-litre petrol, 250 bhp, 300 bhp & 380 bhp, 269 lb-ft, 295 lb-ft and 332 lb-ft. Eight-speed ZF automatic gearbox.

PRICE GUIDE

Poor: N/A
Average: N/A
Good: N/A
Excellent: £36,000 – £58,000
New: £44,830 – £85,500



RANGE ROVER EVOQUE 2

2019 to present

THE SECOND-GENERATION Evoque is the first car to adopt JLR's Premium Transverse Architecture, a platform that will allow them to introduce a plug-in hybrid model. It gets a clutch-based torque vectoring four-wheel drive system, nine-speed auto as standard and redesigned all-independent suspension. There's a choice of seven engines: four diesel, three petrol. Evoque has come of age and remains stylish.

BUYER'S TIP: Competitive value on monthly finance

SPECIFICATIONS

D150: 2.0-litre, 150hp diesel FWD man and auto; D180: 2.0-litre 180hp diesel AWD auto; D240, 2.0-litre, 240hp, diesel, AWD, auto, P200: 2.0-litre, 200hp, petrol, AWD, auto; P250, 2.0-litre, 249hp, petrol, AWD, auto; P300, 2.0-litre, 300hp, petrol, AWD, auto.

PRICE GUIDE

Excellent: £28,000
New: From £31,295

CB RADIO

THUNDERPOLE

NO LICENCE REQUIRED



Call us NOW 01604 402403

T-3000

CB 27 MHZ FM/AM MOBILE TRANSCEIVER

For the complete range of **ALL** CB Radios & Accessories visit

www.THUNDERPOLE.co.uk



CB Radios | From £59.99



THUNDERPOLE T-3000 New Rugged Front Speaker CB Radio



Broad Lane

LAND ROVERS

WWW.BROADLANELANDROVERS.CO.UK









MORROCH BAY

SOUTH WEST SCOTLAND

exclusive remote bay



4 bedroom Morroch Cottage & Southern Croft (sleeps 2-4). South facing in a private bay surrounded by high cliffs. Accessible only 4WD or on foot. Available as holiday accommodation individually or together & with optional exclusive use. The beach cottages are approximately ¼ mile apart with a private water supply.

Both fully equipped and superbly isolated for a perfect holiday hideaway in a private bay.
For further information, availability and prices please visit our website.

www.morroch-bay.com

Both houses have been extensively refitted & landscaped. There is also satellite broadband & WiFi

or contact Susan Nash on 01457-862128 – Fax 01457-852800

HISTORIC

Mobile: 07957 338503 UK: 01509 852490

www.historicmotoringsolutions.com · info@historicmotoringsolutions.com

Specialising in the sale of Land Rover Defenders

20+ carefully selected examples always available.

Located 7 miles from junction 24 of the M1 near Loughborough.



2000 Discovery Td5 Manual

£3,495.000



2003 110 Td5 Pick up 105k miles

£6,495.000



1997 110 CSW 300Tdi Superb condition

£11,995.000



2003 G4 Defender Td5 CSW 98k

£18,995.000



1996 110 300Tdi CSW Riocha Red

£11,995.000



2006 110 Station Wagon 2 owners

£14,995.000

Similar vehicles urgently required



CROY TEC

Interior Upgrades

Interior upgrade components for Land Rover 90/110/130 vehicles

Manufactured from high quality aluminium

Clock surrounds, heater controls and heater vents. We also stock rev. counters and switches

Gear knobs, seat reclining handles door trim components, door and bonnet hinges, window blocks and many more

MAIL ORDER WORLDWIDE

VISA MasterCard

For Further details: Tel **01691 791349**

Fax **01691 791421** email **info@croytec.co.uk**

www.croytec.co.uk

LLANERCHINDDA FARM

Cynghordy
Llandovery
Carmarthenshire,
SA20 0NB
Tel: 01550 750274
e-mail: info@cambrianway.com

4X4 TOURS OF WALES

www.cambrianway.com

4x4 & Green Lane Holidays - Mid Wales

Family run Guest House & Self Catering Cottages with spectacular views, en-suite bedrooms, comfortable lounge bar & excellent home cooked food.

Pressure washer, drying room, Map room with local lanes marked, on-site 4x4 course & guides available.

A very popular venue for both individuals and groups of 4x4 enthusiasts.

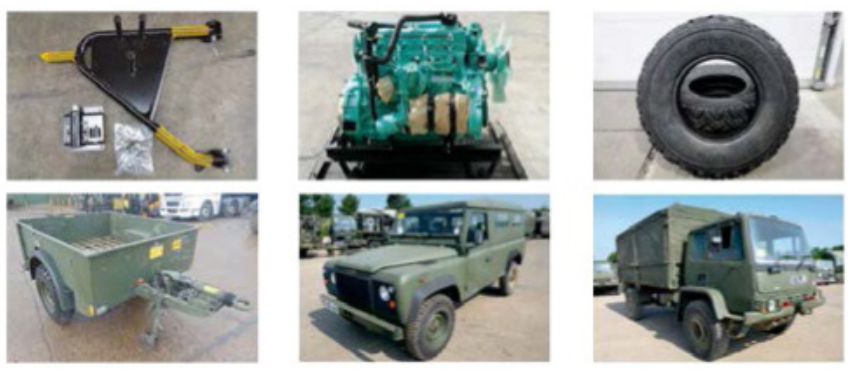


SALE BY ONLINE AUCTION

365 Days a Year / 24 Hours a Day

New Items Added Daily

Visit: **www.mod-sales.com**



BID NOW

Land Rover 90 S0ft & Hard Top · Land Rover 90 Wolf Soft Top · Land Rover 110 Soft & Hard Top · Land Rover 110 Tithonus Hard & Soft Top · Land Rover Parts & Spares · Hitches · Trailers · Militaria

WITHAM SPECIALIST VEHICLES LTD

Email:sales@mod-sales.com

Tel: 01476861361 Fax: 01476861441

COUNTRY VEHICLES

SHELT HILL FARM, SHELT HILL, WOODBOROUGH, NOTTS NG14 6DG

Telephone: 07973 139 483

Telephone/Fax: home. 0115 965 2204



NEW GALVANISED CHASSIS, 96P 300TDI, 1 OWNER, 125K MILES, FULL ROLL CAGE.....£8995



DISCOVERY 300TDI 95M, 3 DOOR, NEW SILLS, READY TO GO TO WORK.....£1,600



LANDROVER DEFENDER 110 200TDI 91J 63,000 MILES GOOD RUNNER.....£4995



TOLANDROVER 110 85C 200 TDI CONVERSION, SIDE WINDOWS, NEW X MEMBER.....£3,495



DISCOVERY 200-300 TDI, BREAKING FOR SPARES, MOST PARTS AVAILABLE, ...POA



200-300 TDI ENGINES, EX DISCOVERY, IDEAL FOR CONVERSIONS, COMES WITH RADIATOR AND INTERCOOLER, ...£450

ALL VEHICLES SERVICED + NEW MOT

EXPORT SHIPPING ARRANGED – CALL FOR DETAILS

OPEN 7 DAYS - Please Call First

1/2 mile off the A6097 - East of Nottingham

Advertise your Land Rover here for FREE

Advertise your Land Rover in LRM and you will reach tens of thousands of like-minded enthusiasts worldwide. Fill in the coupon (right) and send it to us by post or fax or send an email if you prefer. You can include up to 40 words in your ad.

Advertisers using LRM reach the most Land Rover enthusiasts worldwide!

EMAIL
patrick@lrm.co.uk
• Send photo as a 300 dpi jpeg if possible
• Please supply your name, address and telephone number

POST
LRM Classifieds,
Warners Group Publications, The Maltings, West Street, Bourne, Lincolnshire, PE10 9PH
• Please write your name on the back of photo

PARTS FOR SALE

DEFENDER FRONT SEATS

Exmoor Trim Elites in black leather, heated with adjustable lumber support, very comfortable, had very little use and as new apart from small cracks in one bolster on base – easy repair, cost almost £1200 new, can email photos if interested, **£450, 01684 311102 or 07904172968, Worcestershire**

£850 - £2999



RANGE ROVER P38

1994 Range Rover P38, 160,000 miles, HSE so was a top of the range model back in day, comes with 12 month MoT, new starter motor, spark plugs, fresh oil, oil filter, air filter, brake fluid changed, cream leather interior in good condition, bodywork is fair, doors and bonnet have been replaced at some point to a different shade of blue, runs on LPG, I pay 52p per litre for that, heated front screen and heated seats, air conditioning, stereo fitted but requires wiring up, cruise control, tyres all have decent tread, cheap workhorse, **, £850, 07703 068088, West Midlands.**



FREELANDER 1

2006 Freelander, diesel 2.0-litre, very economical on fuel, good condition, MoT until May 6, 2020, 198,000 miles, quick sale, **£890 ono, 07598 428613, Barnet (London).**



FREELANDER 1

Freelander Kalahari, 1.8 petrol, manual, very stylish, owned by mechanic, who can tell you about the Freelander, new head gasket amongst many other new parts such as discs, pads, tyres, etc, 12 month MoT, **£1095, 07887 636968, Denbighshire.**



FREELANDER 1

2004 Freelander 1, 2.0-litre diesel, 130,000 miles, alloy wheels, electric windows, aircon, rear tinted windows, logbook, full vehicle history, new clutch and gearbox, central locking, key and fob, been a great 4x4 for me, **£1200, 07901 644949, Ipswich.**



DISCOVERY I

1998 Discovery 300 Tdi, 124,000 miles, rare two-door manual in white, solid body, paintwork and interior need TLC, nearly new BF Goodrich mud tyres, MoT until February 2020, **£1450, 07889750126, South East London.**



DISCOVERY 2

2003 Discovery 2 Td5, 160,000 miles, 5-speed manual,12 months MoT, part service history, full book pack, tow bar with electrics, 7 seater, back 2 fold down or can come out, electric windows and mirrors, twin sunroof, alloy wheels with 4 good all-terrain tyres, **£1595 ono, 07943 876645, Ryton, Tyne and Wear.**



DISCOVERY 2

2001 Discovery 2.5 Td5 with a reliable auto gearbox, overall in excellent condition throughout, 7 seater, 140,000 miles, MoT June 2020, two keys, Td5 engine which runs very smoothly, all common rust spots have been welded and reinforced, maintained with absolutely no expense spared, both the exterior and the interior of the car are in very good condition,

ADRIAN FLUX Call 0800 085 8000 or visit adrianflux.co.uk

Specialist Land Rover Insurance
Call **0800 085 8000** or visit **adrianflux.co.uk**
Authorised and regulated by the Financial Conduct Authority

Ad heading (eg: **DEFENDER 90**): .....

Text (eg: year, model, general condition, mileage, MoT):

.....

.....

.....

.....

.....

.....

Price: ..... Location: .....

Tel no: ..... Email: .....

Name: .....

Address: .....

.....

..... Postcode: .....



To improve your advert and increase potential sales follow our checklist:

- ☐ Include photo and brief description
- ☐ Year and model
- ☐ General condition
- ☐ Mileage
- ☐ MoT
- ☐ Price
- ☐ Telephone and/or email address
- ☐ Location

Please note: Photographs cannot be returned unless accompanied by a stamped addressed envelope

Warners Group Publications Ltd uses a layered Privacy Notice giving you brief details about how we would like to use your personal information. For full details please visit our website warnersgroup/privacy/ or call us on +44 (0) 1832 720435. If you have any questions please ask as submitting your details indicates your consent, until you choose otherwise, that we and our partners may contact you about products and services that will be of relevance to you via direct mail, phone, email and SMA. You can opt-out at ANY time by logging into the website and checking or unchecking relevant boxes to adjust your marketing preferences or by following the opt-out links on any marketing message sent to you or by contacting us at any time.

Read **LRM** online every month. Go to:
- **pocketmags.com**
- **readly.com**
- **applenews+.com**
- **zinio.com**

and search 'Land Rover'



bodywork is very clean as the photos show, everything working the way it should including full electric windows and mirrors, climate control, air conditioning, radio, central locking spare tyre will all nuts, **£1999, 07495 940367, Solihull.**



DISCOVERY 2

2003 Td5 Discovery 2, 191,871, good service history, MoT until Feb 2020, 4 very good BF Goodrich ATs, intermittent electrical fault — driver's window and RHS pass door lock, otherwise sound reliable 7 seater. **£2000 ono, 07407 440580, Edinburgh.**



DISCOVERY 2

Stunning Discovery 2 Td5 Landmark, 143,000 miles, full service history, two keys, full black leather interior, twin sunroof, seven seats, digital climate control, electric windows doors and mirrors, tow bar, roof rails, 18" 5 arm double spoke alloy wheels, great family vehicle, lots of invoices for work done, best colour combo, **£2950, 07754 627437, Glasgow, Scotland.**



DISCOVERY 3

2006 Discovery 3 TDV6, 173,000 miles, full black heated leather, Harmon Kardon sound system, long MoT, drives very well with no problems at all with the engine, unfortunately does have a small air leak on the suspension, doesn't affect the car when driving, suspension drops a little overnight, goes back to correct height when you start it up in the morning, dent in the driver's rear door, is currently in everyday use and never lets us down, will go quickly due to competitive price, **£2500, no offers please, 07850598332, Brighton, Sussex.**



RANGE ROVER P38

2000 Range Rover P38 4.0 V8 HSE Auto, fully loaded, long MoT, 110,000 genuine miles, service history, long MoT, fantastic driving 4x4, smooth petrol engine, full cream leather trim, Harmon Kardon speakers, electric windows/mirrors/seats/sunroof, alloys, **£1795, 07494 727969 or 07495 048595, Dulwich, London.**

CLASSIFIEDS



RANGE ROVER P38

1999 Range Rover P38, 172,373 miles, good runner, great body, reliable, lot of money spent on bringing it up to spec, new suspension bags all round, new injector pump, new battery, new tyres, refurbished wheels, new radio 7 inch screen, Bluetooth, new brake discs and pads, electric windows and seats, good looker and good buy at **£2675, 07504 271201 or 07908 443854, Kent.**



DISCOVERY 2

2003 Discovery Td5, 196k miles, 11 months MoT, just had a service, all oils (engine, gearbox & axles) changed, a solid vehicle, **£2750, 07921 916663, Tadley, Hampshire,.**



RANGE ROVER P38

1998 Range Rover 2.5 DSE diesel uuto, 130,000 miles, New MoT December 10, 2019, have owned it for six years, have spent loads on it, Polybushed, old suspension removed and replaced with more reliable new coil springs and new shock absorbers, gearbox oil and filter renewed, usual services completed, lots of paperwork, very reliable dependable and comfortable, **£2750, 07557 808887, Witney, Oxfordhsire.**



FREELANDER 2

2007 Freelander 2 HSE, 11 months MoT, 231,000 miles, all done on motorway, heated leather seats, parking sensors, lots of work done, new clutch and flywheel, new power steering pump, new brake pads, runs and drives perfectly, bodywork is mint, **£2200, 07814 633431, Darlington, County Durham.**

£3000 - £4999



DISCOVERY 2

Discovery 2 Td5 manual, 2 months MoT, 160,000 miles, lovely colour, stunning interior, no rot, good chassis, no paint so nothing to hide underneath, service book, but used for business towing catering trailers so had to be 100 per cent reliable, all faults fixed immediately, adjustable height tow hitch with electrics, heavy duty Terra Firma springs all round with 2 inch lift, bigger wheels can be fitted straight on, all the hard work done, fuel tank recently cleaned also new fuel pump, injector seals all renewed plus gasket, fuel pressure regulator gasket, all done in the last 12 months, never taken off road, starts on the button drives flawlessly, no fault lights on dash, plenty of power. **£3300, 07843 448275 or 01443 675939.**



DISCOVERY 2

2003 Discovery 2 Td5, will come with full years MoT, brand new side steps, only 115,000 miles on it, 4 electric windows, remote central locking, CD player, power steering, all tyres good, **£3750, 07584 432131, Portadown, County Armagh.**



DISCOVERY 3

2005 Discovery 3 HSE 2.7 TDV6, 190bhp, auto gearbox still working really well, air suspension faultless, 7 seater, 176,000 highway miles, full Land Rover specialist service history, all belts been changed, 2 keys, 3 keepers from new, MoT until end of April 2020, cheap road tax bracket £325 for the year, very good condition inside and outside, drives perfectly with no faults at all, **£3995, first to see will buy, 07445 320877, Peterborough.**



FREELANDER 2

2007 Freelander 2 Td4 2.2 diesel automatic, 166,500 miles, MoT Jan 2020, shouldn't have a problem getting new MoT, high spec with alarm, sat nav, electric sunroof, climate control, cruise control, R18 alloy wheels, electric windows seats and mirrors, heated front seats, in-car entertainment system, parking sensors, roll away parcel shelf and a boot liner, fitted with roof rails, side steps and a tow bar, ready for winter, reliable 4x4, comfortable drive, **£3550, 07522 245625, Devon.**

FREELANDER 1

2003, 1.8 petrol, 93,000 miles, 4 mm tread on tyres all round, six spoke wheels, removable top, overheating, issues with thermostat or gasket, still runs well, new gasket purchased but not installed, spare engine and box, propshaft taken off, light metal green, clean underneath, currently SORN, too good to scrap, needs an enthusiast to fix the faults, **£4000 ONO, 07816 972201 or 01278 732481, Somerset.**

£5000 - £9999



DEFENDER 90

1998 Defender 90 300Tdi, pretty sorted mechanically, have a long two-page list of replaced components, will share with serious enquirers, runs like a dream and also clean underneath, inspection welcome, genuine MoT until August 2020, touchscreen CD player, centre seat removed cubby box installed, heated seats in the front, installed side facing bench seats in the back,
roof adapted for tent (tent supplied), lots of new bits, 216,000 miles, **£5000, 07841 520080, Bradford.**



LIGHTWEIGHT

1972 Lightweight 200Tdi, 5-speed gearbox, coil sprung, galvanised chassis, good bulkhead, has been in regular use, **offers around £6000, 07855 227627, Staffordshire/Derbyshire border.**



FREELANDER 2

2011 Freelander 2 Sport LE SD4 auto 2.2 diesel, 2 keys, fully loaded, sat nav, heated seats, full service history, 131k miles, 3 owners, MoT untl Sept 30, 2020, mechanically sound, drives really well,

Read **LRM** on-line every month. Go to:
- **pocketmags.com**
- **readly.com**
- **applenews+.com**
- **zinio.com**

and search 'Land Rover'



ADRIAN FLUX Call 0800 085 8000 or visit adrianflux.co.uk

ADRIAN FLUX
Specialist Land Rover Insurance
Call **0800 085 8000** or visit **adrianflux.co.uk**
Authorised and regulated by the Financial Conduct Authority

first to see will buy, need more info or to arrange a viewing call, **£6500 07946 532101, Derby.**



SERIES III

1984 Series III SWB 88in, hard top, 2286cc diesel, excellent condition, service history, upgrades, repairs and replacements makes for a well looked after, easy running vehicle, new MOT, heritage approved, **£6000, 01882 632296, Pitlochry.**



DEFENDER 90

Td5, pick-up, has a super winch and winch bumper, safari snorkel and roll cage, drives very well and everything works how it should, **£8125, 07470 096709, Milton Keynes.**



DEFENDER 110

1996 Defender 110 CSW 300Tdi, MoT August 2020, only 2 owners in the last 12 years, new clutch just fitted, new steering box 12 months ago, 200,000 miles, great runner, lots of work done, good condition, **£8500 ono, 01424 854892, Hastings, East Sussex.**



DEFENDER 90

2001 Land Rover Defender Td5, only 93,982 miles, you are unlikely to find a better Td5, MoT until September 4, 2020, no MoT advisories, just had the chassis re-coated again inside and out with Waxoyl, chassis really good condition, recently had the roof, rear door and chequer plating professionally resprayed, in 2012 Dermot McConaghy, the famous street artist, painted this vehicle, afterwards it was lacquered over to protect his work, the work was turned into a short film, follow the link on YouTube https://youtu.be/RVYB6IX3dBg, vehicle has loads of service history with one very caring owner having it for most of its life, used on the road almost exclusively, my Land Rover mechanic commented on "how tight she was", 4 x Toyo Open Country M/S tyres like new, rear inside of tub lined with bedliner, **£8995, 07879 666350, Cookstown, N Ireland.**



DEFENDER 1110

Defender 110 2.5, strong and reliable truck, 135,000 miles, 12 month MoT, passed with no faults, has been working in a vineyard for the past 6 years, simply not using it enough, has good mud terrain tyres and is a great truck to drive, chassis in good nick, little bit of flaking paint, damage to the lfor top, tear on the front driver seat, usual wear and tear expected on a truck like this, heavy duty suspension (3500 kg), **£7,500, 07825 652581, East Grinstead, West Sussex.**



DEFENDER 90

Defender 90 van, good clean example, 147,000 miles, any inspection or test drive welcome, located near Cowbridge south Glamorgan, **£8500 plus VAT, selling on behalf of a friend, 07784 783356.**



DEFENDER 110

1998 Defender 110 300Tdi, 149,000 miles, MoT Sept 2020, BF Goodrich all-terrain tyres, owned for 8 years, lack of use forces sale, runs well and extremely reliable, will miss her, **£9250 ono, 07825 056628, East Sussex, .**

£10,000 plus



WOLF

110 Defender Wolf XD 2.5 300TdI, 1998, RHD, hard top, 47133 miles, vgc, MoT May 2020, 24v, PAS, R380 gearbox, FROPS, Rad Haz kit, snorkel, G90 tyres, spare wheel, 8 rear seats, **07802 184074, £11,000 ono, Bristol.**



DEFENDER 110 DC

2010 Defender 110 double cab, includes canopy,49,000 miles, estate vehicle, well maintained and serviced, some minor dents and scratches as would be expected from a working vehicle of this age, low mileage and currently only used sporadically on shoot days so light use, **£11,000 plus VAT, 07745 804489, Dunkeld, Perth and Kinross.**



DISCOVERY 4

2010 Discovery 4, full facelift, only 62k, 2 keys, no scams or stupid offers, in no rush to sell, **£14,000, 07845 181053, Sunderland, Tyne and Wear.**



DEFENDER 90

2003 Defender 90 Td5, XS Station Wagon, 12 months MoT, 4 folding seats, fully serviced by Land Rover independent specialist, privacy glass, fully gassed air conditioning, electric windows, Black Boost alloys with Cooper ST tyres (nearly new), full KBX grill and vents, fully undersealed by Nene Overland, upgraded lights and front bumper, upgraded seat rails to improve leg room, sensible chip to 160bhp by Nene Overland, a fantastic looking and driving Defender in excellent condition, reluctant private sale, private reg not included, 79,000 miles, **£16,000, 07976 894463, Witney, Oxfordshire.**

EDITOR'S CHOICE



SERIES I

1952 80in, in good condition, needs a respray and a bit of tlc, overdrive, new canvas, 64,000 miles, used on a monthly basis, selling due to ill health, **£18,000, 01453 549908 or 07851 547173, Dursley, Gloucestershire.**

Read **LRM** on-line every month. Just search 'LAND ROVER' at any of these top sites:
• **pocketmags.com** • **readly.com** • **applenews+.com** • **zinio.com**

Turbos

NO.1 FOR LAND ROVER

DIRECT FIT HYBRID TURBOCHARGERS

TD5 HYBRID TURBO CHARGER NOW AVAILABLE

- NEW & FACTORY EXCHANGE TURBOS AVAILABLE EX-STOCK
- HYBRID UNITS AVAILABLE OR BUILT TO YOUR SPECIFICATION
- NATIONWIDE COLLECTION & DELIVERY 1 YEAR GUARANTEE

Your Turbo Reconditioned From Only

£120.00 inc. VAT

(cause of failure established on all units to be repaired)

for a quote or advice ring:

Turbo Centre UK Ltd

www.turbocentreuk.co.uk

on 01924 404112

or 07979 308969

fax 01924 404115

L.R.Series Land Rover Parts

Est. 1989

www.lrseries.com

Irseries-surplus (eBay Store)

Suppliers of genuine and replacement parts for all Land Rover models

MILITARY SURPLUS RADIO EQUIPMENT FROM CLANSMAN TO CURRENT

PARTS * ORDER HOTLINE: 01430 871590 9am - 3pm

(*parts numbers required)

LR Series Ltd, Unit 3 Brookfield Business Park, Clay Lane,Shiptonthorpe, York, YO43 3PU

MAY 2020 & SEPT 2020

RENTALS AVAILABLE

DEFENDER TROPHY™

WWW.DEFENDERTROPHY.COM

PSAUTOPARTS

SAVE MONEY

ON PARTS FOR YOUR LAND ROVER

BATTERIES - SERVICE ITEMS - OIL

BRAKES - CLUTCHES - TOOLS

5 WHEELER STREET HEADCORN 01622891777

RETAIL | TRADE | EXPORT WWW.PSAUTOPARTS.CO.UK

JohnRichards Surplus

Family run business spanning 3 generations
Ex-Military parts & general surplus including
vehicle related gifts

Land Rover, Discovery, Range Rover parts
Original, Ex MOD & Pattern parts for all models
Tyres & Batteries

Retail outlet THE SMITHY, WOOD LANE HINSTOCK, SHROPS, TF9 2TA
Email for enquiries info@johnrichardssurplus.co.uk
Tel No./Fax: 01952 550391
http://stores.ebay.co.uk/johnrichardssurplus

payments accepted through Paypal, BACS Cheque/Postal Order, Card.

www.johnrichardssurplus.co.uk



LAND ROVER LRM MONTHLY

To advertise here
please call Steve Miller on
01778 391106 or
07586 023248

INDEX OF ADVERTISERS

Active 4x4 Adventures.....160
Adrian Flux.....117
Allmakes 4x4 Ltd.....33
Ardent Off-Road Ltd.....70,71
Ardventures.....59
Astwood 4x4 Ltd.....10
Automotive Component Ltd.....145
BB Classics.....61
Beaulieu.....61
Billing Off Road Experience Ltd..111
British Motor Museum.....110
British Parts UK.....39
Britpart.....69,126,164
Broad Lane Land Rovers.....154
Carole Nash.....116
Contour Autocraft Ltd.....124
Country Vehicles.....155
Croytec Limited.....155
Defender Trophy.....160
Devon 4X4 Centre Limited.....28
Exmoor Trim Limited.....40,41
Extreme 4x4 Ltd.....51
First Four Off Road.....68
Foley Specialist Vehicles.....26
Four Plus 4.....110
Front Runner GmbH.....2
Goodwinch Ltd.....125
Graham Sykes Insurance.....116
Hayward Revive.....77
Historic Motoring Solutions Ltd..155
Jaguar Land Rover UK Ltd.....18,19
John Richards Surplus.....160
JWP TRADING LTD
T/A SP PANELS.....32
KBX Upgrades LTD.....32
KDL GROUP (UK) LIMITED.....24
Kingsley Cars.....50
L.R. SERIES LTD.....160
Lancaster Insurance Services...115
Llanerchindda Farm.....155
Machine Mart.....94,95
Mark Woodward.....110
Maverick 4x4.....60
Morroch Lettings.....154
Nene Overland.....93
NWS Services UK Ltd.....139
Omega Automotive Ltd.....124
Optimill Ltd.....23,163
PA Blanchard &Co.....87
Paddock Motors Ltd.....30
PS Autoparts Ltd.....160
Raptor Engineering Ltd.....32
Real Steel.....145
Revotec Ltd.....68
Rimmer Bros Ltd.....11
Ruskin Design.....10
South West Rust Proofing.....50
The Great British
Land Rover Show.....111
The Turbo Centre UK Ltd.....160
Thunder Pole Astra
Communications.....154
TMD.....6,7
Urban Automotive Ltd.....14,15
Vehicle Wiring Products Ltd.....124
Warrantywise.....60
Witham Ltd.....155
YRM Metal Solutions.....145

Find your local servicing specialist



YORKSHIRE
1 Four Plus 4 Ltd **110**

LEICESTERSHIRE
2 Historic Motoring Solutions Ltd **155**

SHROPSHIRE
3 NWS Services UK Ltd **139**

DEVON
4 Devon 4x4 **28**

HERTFORDSHIRE
5 Foley Specialist Vehicles **26**

SUSSEX
6 TMD **6, 7**

CAMBRIDGESHIRE
7 Nene Overland **93**

WILTSHIRE
8 Broad Lane Land Rovers **154**

FOLEY SPECIALIST VEHICLES

FOLEY SPECIALIST VEHICLES LTD
TEL: 01279 793500

FOLEY SPECIALIST VEHICLES



"I'm just saying in 1955, six students drove all the way to Singapore, and we can't even find our way out of the multistorey car park..."



IAN WEST
Ian's been driving Land Rovers for over 40 years and drawing for LRM since issue 2. He lives on the coast of East Anglia and drives a Freelander 2

DISCLAIMER: The views expressed by contributors and advertisers are not necessarily those of the publishers. Every care is taken to ensure that the contents of the magazine are accurate but the publishers cannot accept responsibility for errors. While reasonable care is taken when accepting advertisements, the publishers cannot accept responsibility for any resulting unsatisfactory transactions. They will however investigate any written complaints.



Send us your shots!

Want to feature your project in LRM? Email patrick@lrm.co.uk

2000 DEFENDER 90 Td5

SAM HOLLAND, HGV MECHANIC, WORCESTER

How did you find your project?
I had an ear to the ground for a while and I found my dream Defender while scrolling through eBay. Luckily I managed to place a winning bid and now I'm the proud owner of a bright red Defender 90.

How long have you owned it and have you been off-roading in it?
I've owned it for six months now and have been on some gentle greenlanes with it. Nothing too challenging or extreme though. I want to make some changes and tweaks before doing that. For now, it's still a rolling project.

What about the engine?
It's a Td5 and they are just great as you and your readers already well know. It's running really, really well at the moment but boys will be boys and I might do some adjustments to it in the future. Extra torque and power are always welcome.

What are the general plans for it?
I want to turn it into my dream overland truck when I have the time and extra cash. I want to travel to faraway places in my Defender. Why own one if you don't go on memorable trips with it?

What have you done so far with it?
I've focussed on the mechanics and the critical areas before turning it into an expedition truck. So far I have put in a whole new clutch. Then I had to carry out some repair work to the chassis. The salty British roads are not kind to the underside of a Defender.

As for lighting I treated it to a lightbar and also some spots. As every memorable road trip needs decent tunes I decided to fit a whole new sound system.

What next?
The next thing that will get time and money are the front seats. I need a new set. I also want to get a winch and bumper just in case I need to self-recover or help someone else in trouble. I have a snorkel on order too, and once that arrives I will fit it.

I am slowly getting there. Deciding what I would like to do next is always a struggle as there is still so much that I want to do to my Defender.

When do you hope to have it finished?
Who knows when it will be finished. It's a Land Rover so they are never finished. I have not set myself a completion date but it would be nice to get out this summer with most of the work behind me.

Who has helped you with the work?
Literally anyone who is willing to hold a torch for me as it's normally dark when I get to tinker on my Defender. I haven't got any other projects on the go at the moment so all my spare time is spent on my Defender.

Does your Defender have a name?
She's called Lucie, it came from my two sisters, and the name has kind of stuck.

How can LRM readers follow Lucie's progress?
I'm always posting pics so they can just look Lucie up on Instagram. Just search for @project.lucie.lr.

OPTIMILL

KEEPING YOUR DEFENDER WINDSCREEN CLEAN IS ALWAYS A CHALLENGE WITH FACTORY WASHERS. OPTIMILL'S HIGH PRESSURE WASHER JET UPGRADE KIT CURES THE SOLUTION.







KIT INCLUDES:

- FRONT 6 JET WASHER BLOCK
- REAR 3 JET WASHER BLOCK
- PLUG AND PLAY WIRING LOOM
- HIGH PRESSURE WASHER PUMP
- BOTTLE ADAPTOR TO ACCEPT THE HIGH-PRESSURE WASHER PUMP
- HIGH CAPACITY WASHER PIPE & ALL FITTINGS



FOR FURTHER DETAILS PLEASE
EMAIL INFO@OPTIMILLRACEPRODUCTS.COM
OR CALL 01282 844443

Optimill Ltd
Church Lane Works
Church Lane
Kelbrook
Barnoldswick BB18 6UF

Optimill Race Products

WWW.OPTIMILL-UK.COM

PLEASE VISIT OUR NEW WEBSITE!