

Visit to Colin Kiel's Classic Car Collection.



2040 car ban

Britain is to ban all new petrol and diesel cars and vans from 2040 amid fears that rising levels of nitrogen oxide pose a major risk to public health. The commitment, which follows a similar pledge in France, is part of the government's much-anticipated clean air plan, which has been at the heart of a protracted high court legal battle. The government warned that the move, which will also take in hybrid vehicles, was needed because of the unnecessary and avoidable impact that poor air quality was having on people's health. Ministers believe it poses the largest environmental risk to public health in the UK, costing up to £2.7bn in lost productivity in one recent year. Ministers have been urged to introduce charges for vehicles to enter a series of clean air zones (CAZ). However, the government only wants taxes to be considered as a last resort, fearing a backlash against any move that punishes motorists. Poor air quality is the biggest environmental risk to public health in the UK and this government is determined to take strong action in the shortest time possible, a government spokesman said. That is why we are providing councils with new funding to accelerate development of local plans, as part of an ambitious £3bn programme to clean up dirty air around our roads. A briefing on parts of the plan, repeats the heavy focus on the steps that can be taken to help councils improve air quality in specific areas where emissions have breached EU thresholds. Measures to be urgently brought in by local authorities that have repeatedly breached EU rules include retrofitting buses and other public transport, changing road layouts and altering features such as roundabouts and speed humps. Reprogramming traffic lights will also be included in local plans, with councils being given £255m to accelerate their efforts. Local emissions hotspots will be required to layout their plans by March 2018 and finalise them by the end of the year. A targeted scrappage scheme is also expected to be included. Some want the countrywide initiative to follow in the footsteps of London, which is introducing a £10 toxic 'T-charge' that will be levied on up to 10,000 of the oldest, most polluting vehicles every weekday. Sources insisted that while the idea of charges were on the table, there was no plan to force councils to introduce them, and that other measures would be exhausted first. They hope the centrepiece of Wednesday's strategy will be the plan to ban diesel and petrol sales completely by 2040, in line with Emmanuel Macron's efforts across the Channel. The French president took the steps to help his country meet its targets under the Paris climate accord, in an announcement that came a day after Volvo said it would only make fully electric or hybrid cars from 2019 onwards. AOMC Newsletter, August 2017

Delage Type-S: The 103-year-old grand prix car saved by a 3D printer

Australia is home to the only surviving 1914 Delage Type-S grand prix car in the world, and thanks to a world-first feat of technology this much-loved centurion is still on the road. In 2014, when the engine block cracked and water pumped out of the exhaust system, the Delage ground to a halt and was consigned to a mechanic's workshop in Castlemaine, 130 kilometres north-east of Melbourne.

THE HISTORY OF THE DELAGE

- In 1914 just three Delage Type-S cars were made for a premier race in Lyon, France
- World War I began a month after the race and racing in Europe came to a halt
- The Delage Type-S cars were sold to the US, then in the 1920s one of them was brought to Australia to race
- The car was driven by some of Australia's earliest race car drivers and was owned by motor racing legend Lex Davison

RECREATING THE ENGINE BLOCK

With no replacement parts or original drawings to go by, and with few people having the traditional manufacturing skills, pre-war motorcar engineer Grant Cowie looked for alternative ways of rebuilding the complicated 16-valve engine. "I knew that to use the traditional method, which involves a wooden pattern, would be prohibitively expensive and with such a complicated casting it was possible it would take several attempts to get it correct," Mr Cowie said. He decided that using digital technology to clone the original block would be the most accurate, efficient and non-destructive method to get the car back up and running. The trouble was, a repair this complex had never been attempted before. Using powerful lasers, the engine block was scanned inside and out, saving thousands of hours of pattern making, with months of work done in a few days. The scan data was then used to digitally repair the cracked engine on a computer before a sand mould was created using a 3D printer. A local iron foundry cast the engine using the 3D-printed mould, before it was finished with traditional manual machining. After the engine was installed, there was an enormous sense of relief when the Delage turned over successfully. "It's one thing to finish machining it, then you've got to put it all together," Mr Cowie said. "And just the relief when it first started — and it's been great since the moment we started it." While many modern car parts are 3D printed, project manager Philip Guilfoyle said a repair of this scale was unique. "To my understanding this hasn't been done before in car restoration in the world," he said. Car owner Stuart Murdoch was determined that any repairs done remained true to the original, so when this unique restoration technique was suggested to him he responded: "Boldness, be my friend." "I had faith in them and I wasn't disappointed," he said.

A FEAT OF ENGINEERING.

And now that the 103-year-old car is back up and running, Mr Murdoch is a very satisfied customer. "It is a considerable achievement for all those involved and, might I say, quite an achievement for Australian engineering," he said. Motoring historian Douglas Blain, meanwhile, marvelled at the fact that this one priceless S-Type still remains. "That it lives on in such a state of originality, and is maintained and used by its dedicated long-term owners rather than gathering dust in some sterile museum, is marvellous indeed," he said. And Mr Guilfoyle thinks the digital repair technique may revolutionise restoration car repairs as mechanics like Mr Cowie become less dependent on dwindling car parts and fading skills. AOMC Newsletter, August 2017



The Delage racing in the 1914 French Grand Prix



The cloned engine installed.

Minerva Land Rovers

Following the Second World War, Minerva could not design and produce a brand new car by itself and so, following their experience of building under licence, the Standard Motor Company were approached and their Vanguard model was soon being assembled in Belgium. Aware of the Belgian army's search for a new lightweight 4x4 vehicle, Minerva approached the Rover company in the Spring of 1951. In June 1951 the Rover company learned that a total of 2500 vehicles would be required and that Rover were competing against jeep manufacturer Willys for the contract. In October 1951 the deal was agreed, with documentation being finalised on 7th May 1952. Under this deal it was agreed that Rover would supply full technical assistance to Minerva who would be granted permission to manufacture Land-Rovers under licence. Rover would supply Completely Knocked Down kits (with CKD chassis numbers) consisting of the chassis, engine, axle, transmission and other parts to the Minerva company in Antwerp who would then build its own steel body to suit the Belgian army. The Minerva sales literature stated that 63% of the parts used in the vehicles were of Belgian origin. The chassis were later built in Belgium as they are different in a number of ways to the Land-Rover chassis, being box welded and lacking the PTO hole provision in the rear crossmember. The Minerva assembly line employed about 500 skilled workers who could produce 50 vehicles a day. These vehicles produced were left hand drive, 80 inch wheelbase models, with the 2 litre Rover 10E engine. The most obvious differences between the Minerva and the Land-Rover Series one being that the front wings that are squared off and sloping. The bodywork, including the doors, were all steel and a narrower front grille was used with the Minerva badge affixed. Two styles of badges were used, the earlier version stating 'Land-Rover - manufactured under licence by Minerva' and the later having the oval Land-Rover badge at the bottom of the Minerva name. Slatted oval panels on either side of the grille cover the apertures and the front bumper was fitted with a single "pigtail" towing eye on the drivers side. The side lights were located at the bottom of the wings and the headlights were larger than usual. Smaller brake lights were fitted to the rear panels. Other differences include the exhaust being emitted from beneath the drivers door and the door handles. The 80 inch army Minerva door handles were like those of its British counterpart with the canvas flap - although the door locks are slightly different. However, the civilian Minervas had external door handles. The military vehicles look quite different from the rear; a three quarter height fixed tailgate being fitted. The police and military versions had the spare wheel mounted on the right and a jerry can holder mounted on the left hand side (the Minerva petrol tanks are a little smaller than the Land-Rover equivalent). No centre seat was provided, a toolbox being fitted in its place which was about the same size as a seat base cushion. (The space under the seat which Series Ones often use as a toolbox housed one of two 6-volt batteries, the second being under the bonnet). It is thought that the Belgian army stockpiled the vehicles and thus effectively brand new vehicles were, until quite recently, still entering service. They simply had the mileage of occasional trips around the warehouse which prevented them from seizing up! An armoured / assault vehicle version was also produced, with heavy plating, armoured glass screens and machine gun mounts at both the front and back. The spare wheel for these was mounted on the front, in front of the grille. Field ambulance versions were produced, being basically the same as the standard vehicle but with the tilt extended at the rear to cover the overhanging stretchers. It is thought that this tilt could in fact be the same as used by the ambulance version of the Jeep. In October 1953 a civilian version of the Minerva Land-Rover was announced. This new vehicle was different in a number of ways from the previously produced military versions. The new vehicle was fitted with three seats, a drop down tailgate and provision in the rear cross member for a rear PTO to be fitted. A choice of colours was also offered. The brochure for the civilian model describes a central PTO from the main gear box to drive belts and describes the vehicle being useful for any portable apparatus - including generators, welders and water pumps. Indeed, the scenes used for the Minerva literature are virtually identical to those that Land-Rover were using - with the obvious exception of slightly different vehicles. Like our own Series Ones, Minerva versions included station wagons, hard tops, truck cabs, and tilt versions; the tilt uniquely being fitted with side windows. These vehicles were apparently well received by construction companies and farmers but are now very rare. In 1954, the new 86 inch version was introduced, (as in the UK replacing the 80 inch). This vehicle was produced for the next two years, until 1956 when all contracts between Minerva and the Rover Company were terminated. During this time, only 1,100 86 inch vehicles were produced, and these are now extremely rare. It is likely that these 86 inch vehicles were primarily only available as civilian models. The 86 inch model had 3 seats and rear PTO hole. The rear agricultural plate was also fitted. These vehicles had tailgates and the external door handles as fitted to the 80 inch civilian vehicles. The original Belgian army order was for 2,500 vehicles although a further 3,421 were subsequently ordered. As a result, despatches for 1952 and 1953 totalled 7,859 Completely Knocked Down vehicles. However, only 200 CKD 86 inch vehicles were despatched during 1954 and this may well have contributed to the dispute between the two companies and agreement that all contracts would be terminated after a further 900 vehicles had been despatched. Thus, from May 1952 until the contract between the two companies was terminated at the end of June 1956, a total of 8,959 CKD vehicles were despatched from the Rover Company to SA Societe Nouvelle Minerva of Belgium. In 1956 Minerva announced the C-20 and M-20 (Civilian and Military) Tout Terrain vehicles but very few of these are believed to have been produced and the company soon experienced financial difficulties. The Minerva company finally went into liquidation in 1958.



Alan MacRae photographed these Minerva's in England



Photos from Mal Trull taken at the Land Rover Factory



LAND ROVER'S 70TH BIRTHDAY IN AUSTRALIA

COOMA SHOW GROUND, NSW.

Friday 30th March to Monday 2nd April, 2018

SAVE THE DATE

Plans are underway for the celebration of Land Rover's 70th birthday. Following on the success of the 60th, we have been welcomed back to Cooma by the Snowy Monaro Regional Council and the Cooma Car Club for a four-day event over Easter 2018. With Land Rover's close ties with one of the world's greatest engineering feats, the Snowy Mountains Scheme, it's fitting that we should return to Cooma.

Land Rover Australia have already signed up as a key sponsor, and as in past events will have all the latest models on display.

All sorts of events are being planned by the sponsors and organisers, the Land Rover Owners' Club of Victoria, The Land Rover Owners' Club of Sydney, the Range Rover Club of New South Wales and the Land Rover Club of the ACT. The 60th in 2008 event attracted over 750 Land Rovers and nearly 1,400 enthusiasts. The organisers of the 70th are hoping for 1,000 Land Rovers. Any owner of any type of Land Rover or Range Rover, be it modified or un-modified, old or new, in original condition or fully restored should attend. But you really need only to be a Land Rover lover – you don't have to own one to enjoy the weekend.

Activities at the 70th will include:

- Displays by trade exhibitors.
- Trips of varying standards in and around the Cooma and Snowy Mountains district.
- A motorkhana.
- One (and possibly 2) Terrapod test tracks, supplied by Land Rover Australia.
- The Grand Parade of Land Rovers though the main streets of Cooma.
- A swap meet.
- Demonstrations of recovery techniques.
- Attractions for the children.
- A Gala Dinner with award presentations, with guest speakers.

The time has come for all those Land Rover lovers who have been putting off restoring their beloved old vehicles to get to it.

