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Swansea Historic Vehicle Register Ltd.

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www.shvr.co.uk

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Cover picture:

Remembering the good times. Singleton Show 2018.

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Editorial

So who would have thought it. A month ago we were worried about floods and now we couldn't even go out and paddle even if there was a flood. You may notice a bit of humour creeping into the newsletter. This was the case when I used to produce it with Mike P in the 1990s. However, this is probably a key element under today's circumstances. A good chuckle makes you feel better. The AGM was an early casualty of the virus which was postponed following advice.

Now we are all marooned this provides a good opportunity to work on the cars, and catch up on all the deferred jobs. The next step for me is installing the new interior on the Mk2, starting with the headlining, which will be a bit of a challenge. I think it is a case of just taking time and using as many plastic clamps as possible. The 420 is now up to speed mechanically after we had to install a full set of steering column bushes. The steering was actually rattling and the horn relay activating as you rocked the steering wheel. The hardest part was reinstalling the column and setting up the automatic gear selector.

The key thing now is for everyone to stay safe. I've asked the committee to think about how we can all stay in touch using the website and Facebook Page. Apart from that, this newsletter will still go out every month, and hopefully add a bit of cheer. So if you have any stories on what you are doing on your cars, you can post them on the Club Facebook Page or send me a copy.

Event wise, obviously there is nothing to report. So watch this space!

Take Care Steve M

CLUB COVID-19 UPDATE

During these uncertain times we find ourselves in at the moment, with everything locked down and instructions to stay at home and all venues unavailable to us, we have suspended all club activities for the present. Not that many of you would want to be out and about at the moment anyway.

With Drive-it Day and the Singleton Show both cancelled, our intention is to hold the Singleton Show in August on the bank holiday weekend. To this end Adrian is holding entries already received over for the August date. Drive-it-Day will be re-run later, on a date that hopefully won't clash with any other event that may also have been rescheduled by other clubs.

We will do our best to provide future magazines on a regular basis to keep you in touch with the club and its event proposals that may be planned, as and when we are allowed to. The club is financially sound thanks to careful management by our treasurer and will continue to function in the background, sorting out a programme for the remainder of the year and will resume normal activities as soon as things clear up. I know, SHVR and normal, is a bit of a contradiction in terms!

Some Hero has replaced the empty toilet roll aisle with the Daily Mail



Keep well and healthy and in the meantime and we look forward to

seeing you all again in the near future. At least we all have time now to do all those 'little' jobs on the car that we have put to one side in the past.

Mike J

Day 10 of Coronavirus Social Distancing.

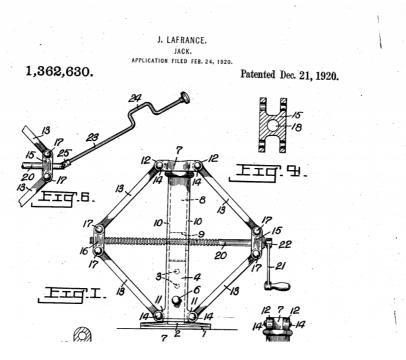
Had an interesting conversation with a spider today. He was a Web Designer.

Who Invented the Car Jack?

The trail to finding the original inventor of the car jack is messy. It's like trying to figure out who invented the ramp. The scissors jack is an adaptation of the screw jack. A screw is a ramp wrapped around a post. Ramps are one sort of simple machine, a privilege humanity has enjoyed since before Christ walked the Earth.

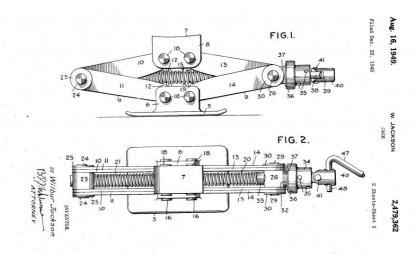
The screw jack works with the screw shaft situated vertically. Placed under a navy object, the object lifts when the operator turns a crank connected via sprockets and such to turn the screw shaft one thread at a time. Leonardo da Vinci supposedly used screw jacks to lift heavy objects, but it's doubtful the idea was his alone. What matters to our research was figuring out who took the basic screw and turned it sideways so a human of any strength could turn a crank to lift a car off the ground.

When the Canadian Jack LaFrance submitted his design for a diamond-shaped jack on February 24, 1920, it was in Montreal, Quebec.



His patent is the oldest one in Google Patents under the name "scissor jack." The timeline and his name lend themselves to the credibility of the research. Plus, the picture looks like your basic scissors jack.

There is a base, and a platform, connected by two legs which bend at the knees in opposite directions. Through those knees, the spindle travels to raise or lower the platform, presumably under one's car.



LaFrance may have beaten the trail of inventors to the basic concept, but putting one in every car didn't happen right away. Further refinements, like the 1949 version from Wilbur Jackson above would make the jack more collapsible so it could stow with ease.

By best estimates, screw jacks made it into cars by the 1970s, but they may have made appearances elsewhere before that. If your car had a jack before that, it was bumper jack, a ratcheted dangerous design that can hang its hat on countless injuries and deaths.

Five Surgeons are taking a coffee break...

1st Surgeon: "Accountants are the best to operate on, because when you open them up, everything inside is numbered."

2nd Surgeon: "Nah, librarians are the best. Everything inside them is in alphabetical order."

3rd Surgeon: "Try electricians! Everything inside THEM is color coded."

4th Surgeon: "I prefer lawyers. They're heartless, spineless, gutless and their heads and their rear ends are interchangeable."

5th Surgeon who has been quietly listening to the conversation: "I like Classic Car Owners... they always understand when you have a few parts left over at the end."

1990s Car Prices



Welcome to the 1990s: the decade of Brit Pop, the Spice Girls, the Tamagotchi and Noel's House Party. Yes, it was a bit of a mixed bag. Football very nearly came home, Blur and Oasis often came to blows and Jarvis Cocker bared his bottom at the Brit Awards.

House prices rocketed from £59,785 in 1990 to £101,550 by the turn of the Millennium.

Looking back, cars weren't exactly cheap. The Daihatsu Charade GTti might have been the world's most powerful 1.0-litre car, but you'd need £8,299 to secure a slice of three-pot turbocharged loveliness. Today, the equivalent price will secure a Ford Fiesta ST-2. A year later, a Renault 19 16v, a forgotten gem from the 90s would have cost £12,725. In today's money, that's more than the new Renaultsport Megane 275 Cup-S.

Check out the price of a Jaguar XJS 4.0 Convertible in 1992. At just shy of £40,000, it was about two-thirds of the average house price. Expensive? At £77,284 in today's money, that's



more than a Jaguar F-Type S AWD.

In 1993, the Citroen ZX Volcane turbodiesel would cost less than £13,000, not bad for what was arguably the world's first diesel hot hatch. At £21,895, the Vauxhall-based Saab 900 SE Turbo Coupe looks expensive, as does the £15,499 Hyundai Sonata 2.0 CD.

But that's nothing compared to the launch price of the Porsche Boxster. At £33,950 it sounds good value, but inflation adjusted, that results in a figure of £57,510. There are two things to consider here.

Firstly, the average house price in 1997 was £76,103. Secondly, you can buy an entry-level 718 Boxster in 2016 for a mere £41,739.

You've never had it so good. The last note for the 1990s would be the Bristol Blenheim. The price in 1998 was an eyebrow-raising £119,000, which is around £37,000 more than the average house price.



Year/Car/Price new (2016 adjusted)

1990: Daihatsu Charade GTti – £8,299 (£18,640)

1991: Renault 19 16v – £12,725 (£26,102)

1992: Jaguar XJS 4.0 Convertible – £39,900 (£77,284)

1993: Citroen ZX Volcane TD – £12,630 – £12,995 (£23,590 – £24,272)

1994: Saab 900 SE Turbo Coupe – £21,895 (£40,252)

1995: Hyundai Sonata 2.0 CD – £15,499 (£27,826)

1996: Land Rover 90 County V8 – £14,468 (£25,096)

1997: Porsche Boxster – £33,950 (£57,510)

1998: Bristol Blenheim – £119,000 (£195,520)

1999: Lexus IS200 – £20,500 (£32,575)



FEDERATION British Historic Vehicle Clubs Vesterday's Vehicles on Tomorrow's Roads

PRESS RELEASE

E10 fuels consultation. FBHVC position statement.

On Wednesday 4th March 2020, Her Majesty's Government published a consultation on proposals to introduce E10 petrol as the standard for fuel across the UK. The lead proposal would introduce a minimum ethanol content of 5.5% for standard 'pr emium' fuels in 2021, whilst - and this is important for historic vehicles - maintaining the current E5 blend in the 'protection' grade.

The consultation seeks views on the proposed mechanism, definitions and derogations. It also includes a call for evidence on potential changes required to existing policy mechanisms (including targets under the Renewable Transport Fuel Obligation) following an introduction of E10. The consultation will run for six weeks, closing on 19th April and the FBHVC have received a formal invitation to participate in the consultation and have confirmed our intention to do so. The reasons given for considering the introduction of a standard of fuel containing up to 10 per cent bioethanol, centre around attempts to make significant savings on carbon emissions as the government makes attempts to meet its climate change targets.

Typically, fuel companies currently blend petrol with up to 5% bioethanol and diesel with 7% biodiesel. The government have a target to ensure that 9.75% of all transport fuels must come from renewable sources by the end of this year under their "Renewable Transport Fuel Obligation". The government believe that a move to standardising E10 fuel will be equivalent to taking 350,000 cars off the road each year. The Department of Transport estimates that this may cut CO2 emissions for transport by 750,000 tonnes per year.

E10 is of concern to historic vehicle owners because it may cause some flexible fuel hoses, seals, gaskets, plastics and certain metals critical to the fuel system to corrode or degrade. This may cause damage to fuel pumps, carburettors, seals on injectors, pressure regulators and fuel tanks that are not resistant to ethanol. The bioethanol may also dislodge particles on older fuel systems causing blockages.



There are other challenges facing the roll-out of E10 fuel aside from compatibility. As published in Federation News, Issue 1 2020, we understand that the only UK refinery for the additive has closed and the environmental costs of shipping additives from other parts of the world negates any environmental benefit.

The Federation note that the government, in previous consultations on the matter, have recognised that historic and cherished vehicles are not advised to use fuel with these proposed levels of bioethanol. The Federation has also advised in previous consultations of the requirement to run an alternative 'protection grade' alongside E10 for historic vehicles and we will seek to reinforce that standpoint in this latest consultation. The Federation will also seek reassurance that historic vehicle owners will not be financially penalised at the pump when purchasing protection grade fuel and that its availability will not be time limited.

In September 2019, compulsory fuel labelling was introduced to ensure that consumers were informed of the contents of the fuel they were using on the forecourts, their environmental impact and a fuel's suitability for a particular vehicle. It required a new set of fuel labels which were harmonised across Europe. E10 petrol is used elsewhere on the continent and is particularly prevalent in France and Germany, where it is also offered alongside E5 grades.

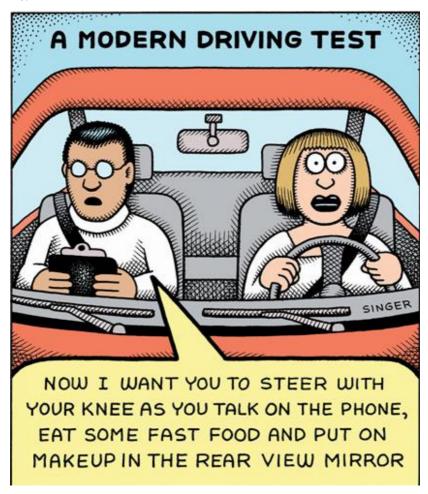
The same day as the consultation was announced, FBHVC Chairman David Whale attended a meeting at the House of Commons with the All Party Parliamentary Historic Vehicles Group, chaired by Sir Greg Knight, to reinforce the concerns of the Federation's members directly with MPs.

The following question was posed to the Secretary of State for Transport by Sir Greg Knight, Conservative MP for East Yorkshire: "To ask the Secretary of State for Transport, what assessment he has made of the potential effect of the use of E10 fuel on older vehicles?" Which received the following response from Rachel Maclean, Parliamentary Under-Secretary (Department for Transport): "Increasing the share of bioethanol in petrol by blending up to 10 per cent, known as E10, could provide significant carbon savings, helping us meet our climate change commitments. One of the main barriers to introducing E10 has been vehicle

compatibility. Currently, around 95% of petrol cars used in the UK can use E10, but around 700,000 are not warranted by their manufacturers to use

E10. This number is expected to decrease as vehicles come to the end of their life. However, some classic and cherished vehicles that are not advised to use E10 will remain in use. The prolonged use of E10 fuel in those older and classic vehicles not under manufacturer warranty can cause corrosion of some rubbers and alloys used in the engine and fuel systems. For those vehicles, the Department remains committed to ensuring that E5 is retained as a protection grade, if E10 is introduced."

The FBHVC will be consulting with all interested parties and our member organisations prior to making our submission to the E10 consultation by the deadline.



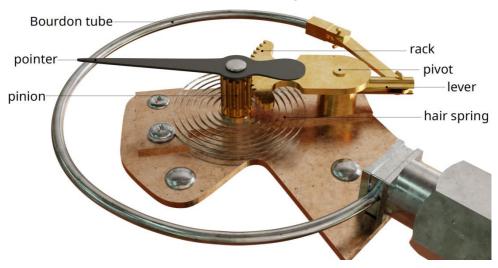
How Car Temperature Gauges Work

We rely on temperature gauges to tell us the conditions inside the engine's cooling system, naturally assuming that the readings are accurate. The gauge typically sits in the car's dash for the lifetime of the vehicle and never sees maintenance or adjustment. It simply works. So how does that happen?

There are basically two types of temperature gauges, electric and mechanical. Today's cars use electrical gauges but not too many years ago many used mechanical gauges that operated with a Bourdon Tube.

The Bourdon Tube

A Bourdon Tube is a thin metal — usually brass or copper — tube that is filled with an easily vaporized fluid, typically alcohol. It is sealed at both ends. At the gauge end it is formed into a circle or spiral with its end attached to the indicating needle by some form of linkage. The other end is fitted to a water-tight connector that is in direct contact with the coolant in the engine.



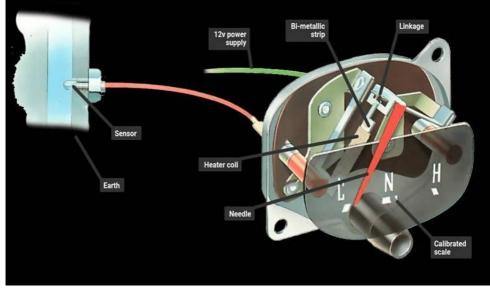
As the coolant warms up the alcohol in the Bourdon tube expands. The expansion transfers its force to the coiled end of the tube inside the gauge. As the coil or spiral unwinds it pulls the linkage on the needle, which in turn shows a temperature reading on the gauge face. The gauges are calibrated during the manufacturing stage and are not adjustable afterward. Since the Bourdon Tube design is purely mechanical the gauge will continue to read some temperature

level even after the engine is shut off. As the engine cools the gauge's needle will return to its rest position.

Bourdon Tube gauges aren't used anymore because of cost and convenience factors. The tubes are delicate and must be carefully routed from the dash to the appropriate fitting on the engine. The gauges themselves are far more expensive than electric or electronic gauges and if the tube is kinked or split the entire gauge assembly must be replaced.

Electric Temperature Gauges

Basically, an electric temperature gauge is a voltmeter. The scale on the gauge face is reading temperature but the instrument itself is reading voltage. The gauge itself is comprised of a bimetallic (two different metals fastened together) "hairpin" assembly. This assembly is attached to the needle.



The gauge requires an electric circuit and a sending unit in order to read temperature. The sending unit is a temperature-sensitive material that is part of a variable resistance, water-sealed unit that sits in the coolant stream in the engine. As the engine warms up the resistance in the sending unit is lowered gradually until the system reaches maximum heat. The sending unit is the "ground" portion of the circuit.

In the completed circuit the battery voltage passes from one side of the gauge, through the bimetallic spring and onward to the sending unit, which is grounded to the engine. When the engine is cold the resistance is high, so little current

passes through the gauge. This small current doesn't heat up the bimetallic spring, so the gauge reads a low temperature. As the engine warms and the sending unit's resistance lowers more current passes through the gauge and the needle reads higher and higher because the bimetallic spring expands further. Electric gauges can fail to read accurately because the sending units fatigue or rust over, or simply lose their connection to ground. The bimetallic spring can also fatigue over time, rendering the gauge inaccurate or inoperable.

Pont Abraham and the M4 in Wales

When we were sat in Pont Abraham Services on the February Sunday lunch we were asking ourselves when the Services were built and when the M4 was built.



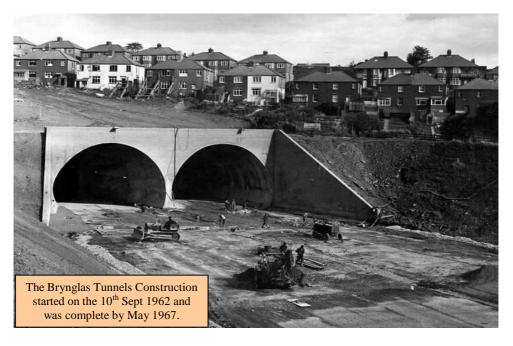
Some might say that the M4 construction was one of the most important events in recent Welsh history. For most, it is just 78 (125km) miles of tarmac. But whether it is your yellow brick road to new horizons, or highway from commuting hell, the M4 motorway is culturally and socially ingrained on the lives of the 2.2m people who call south Wales home. While Wales has less than 5% of the 2,000 miles (3,219km) of motorway constructed in 20th Century Britain, the London to south Wales highway is the economic artery of a nation still recovering from the loss of its heavy industry. "The building of the M4 was the number one construction project in Wales in the 20th Century," said Wales' former First Minister Rhodri Morgan.

Start of the journey

Relieving Port Talbot of congestion and bridging the formidable Severn Estuary was a new dawn for modern day Wales in 1966 - as road started to replace rail,

mainly due to the infamous Dr Beeching cuts to the railway network in the 1960s. While the Brynglas Tunnels in Newport and Port Talbot's flyover are more notorious for being traffic congestion hotspots, they are also working British motorway history, which have raised south Wales' transportation expectations.

The Welsh demand for a highway and bridge across the River Severn dates back to the years following the World War One but was delayed due to the Great Depression, World War Two, post-war recession and financial priority of establishing the National Health Service. "And during the 1950s, the Conservatives decided to build the Forth Bridge first because its political needs in Scotland were greater, whereas most of South Wales was regarded as immovably Labour. The M50 motorway from Ross was given strategic priority over the M4 as the government wanted to get steel quickly from Port Talbot to the demanding car making plants in the Midlands."



As motorway demand boomed across Britain, Westminster needed convincing of the financial justification of a strategic highway route to the relatively small population area of south Wales. The Welsh delegation persuaded Whitehall a motorway was necessary for a faster link to Ireland - via the ports of Swansea and West Wales - and today the M4 forms part of the 4,000-mile (6,437km) European highway E30 that links the Irish port of Cork to the Russian city of Omsk.

The M4 route - initially due to end at Tredegar Park in Newport, now junction 28 was strategically located through the middle of Newport to generate traffic numbers to justify its existence to government. Then, Newport was unique as, despite being a relatively small town, it had five motorway junctions to attract local traffic to use the M4 as a bypass and not a long-haul route, the intention of a motorway. A subsequent study has shown 75% of traffic in the tunnels - and 81,000 vehicles used the tunnels daily in 2015 - are local.

But the tunnels problem could have been averted since the reason the tunnel is at Brynglas is because there was a railway line across the side of Brynglas Hill. Otherwise they would have cut through the hill, leaving room for possible motorway widening. The shame is Dr Beeching's cuts closed that line half way through construction. With a little planning, some of the subsequent traffic problems could have been averted as we would have built the cut through the hill. Other routes around Newport were considered but the northern section was chosen, not just to serve Newport but towns up the valleys like Pontypool, Risca, Newbridge, Caerphilly and the new town at Cwmbran." The 'Newport bypass' opened in 1967 - the year after the Severn Bridge - but the Welsh Office immediately demanded an M4 extension following its formation in 1965.

There was a growing urgency to the need to act, arising from the election of Plaid Cymru's first MP in 1966. This was a political development of near epic proportions; suddenly the frustrations over how Welsh economic and cultural needs seemed to be marginalised by the status quo had translated into nationalist votes.

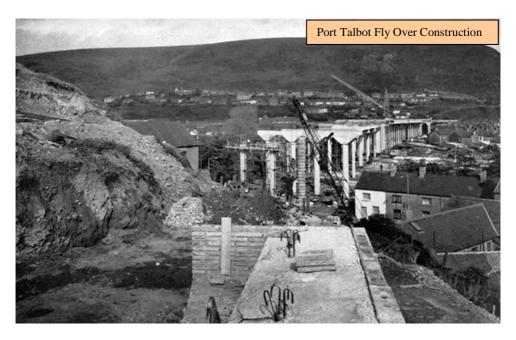
Cardiff council's favoured route for the M4 through the capital was along the current A48 (M) or Eastern Avenue, past the University of Wales Hospital, through the Gabalfa interchange before turning right through the heart of historic Llandaff and joining the current M4 line just east of what is now junction 33 and Cardiff West Services. Planners had the intelligence of the problems with congestion at Newport and new guidelines that motorways should be intercity routes with long sections between junctions so building to the north was the most sensible and sensitive option.

But progress was slow.

The slow release of funds, arguments over routes and subsequent public inquiries hampered progress. While the narrow Brynglas Tunnels highlighted the importance of forward-planning should demand outdo capacity, the imposing Port Talbot flyover played a part in changing legislation. The bypass at Port Talbot is

very intrusive on residents - so much so locals often hang their washing out under the flyover.

That situation and the building of Westway flyover in east London played a part in the government's 1973 White Paper Putting People First where it made it illegal to build motorways so close to built-up areas. Lessons were learned in the early days of motorway building, however, the simple existence of the road changed people's mental geographies of distances, even contributing to a sense that Wales itself was not so remote.



Simply getting from one place to another is now quicker, smoother and less frustrating that ever before. And for that reason alone the M4 is one of the most important places in the history of Wales. By 1974, as the incoming secretary of state for Wales would later note, the motorway's expansion had 'crunched to a halt'. A year later, a newspaper was claiming the road between Cardiff and Swansea was still one of the worst linking two major towns anywhere in Europe. The 'Cardiff bypass' was completed in 1980 north of the city - as plans to build a new town at Llantrisant were shelved - and with the M4 'Bridgend bypass' to follow in 1981, the car journey time from Swansea to London was cut to just over three hours (on a good day) within the space of eight years. So what about Pont Abraham Services. The Services opened in 1983. The name of the service area is very unusual, at least as far as motorway services go. Firstly it is not named after

a settlement but a landmark, and secondly that landmark is named in Welsh - 'Pont' being Welsh for bridge.

Before the motorway was built, the A48 used to cross the River Gwili on a bridge which was positioned in the middle of where the roundabout now is. That bridge was known locally as Pont Abram, after the stonemason who built it. The new roundabout took the same name - modernised to become Pont Abraham, as did the service station that was added to it. There used to be a hill figure of a teapot and teacup on the hillside, constructed in 1992 to enhance the Services's entry into the National Tea Council "Motorway's Best Cup of Tea" competition, which was removed in the mid-2000s.





The Standard Motor Company

The Standard Motor Company was founded in Coventry in 1903 by Reginald Maudslay and backed by John Wolfe Barry. It started out in a small factory in Much Park Street, initially employing just seven people. The first car was rear-wheel drive, powered by a single cylinder engine with a three speed gearbox. It was



replaced by a two-cylinder model, followed by three and four cylinder versions and in 1905 the first six-cylinder vehicle.

The company took a stand at the London Motor Show in Crystal Palace in 1905 which proved very fruitful. A London car dealer called Charles Friswell signed-up to take all the cars Standard could make. He clearly had a lot of faith in the company and became its chairman in 1907. His involvement heralded expansion and his efforts saw Standard supply 70 cars for King George V and his entourage at the 1911 Delhi Royal Durbah. However Charles Friswell's involvement did not continue in a positive vein. There were accusations of interference and in 1911 Standard had some financial problems because of Friswell's company.



The company weathered them but in 1912 Friswell's sole-selling deal with Standard was ended and the businessman also sold his interest in Standard to CJ Band and Siegfried Bettmann, the founder of the Triumph Motor Cycle Company. Standard became a public company in 1914 and during the First World War produced more than 1,000 aircraft at its new works in Canley. This

was to become the main centre of operations and at the end of hostilities car production restarted.

The company produced a range of small cars and by 1924 it was selling a similar quantity of cars to Austin, producing more than 10,000 cars in 1924. The company was struggling again by the late 1920s, with profits falling, a failed export contract and slow sales of larger models. Standard's fortunes were revived in part with the arrival of Captain John Black as joint MD in 1929.

He oversaw the supply of chassis to external coachbuilders including Jensen, Avon and Swallow (later to become Jaguar). The 1930s proved a good period for Standard with new models like the Standard Nine and Standard Ten doing well.

1935 saw the arrival of a new range of Flying Standards (the name lives on in a Coventry city centre pub) and by 1939 the car maker was producing more than 50,000 cars a year in Canley.

Car production continued during the Second World War but like most factories the focus was on the war effort and 1,100 Mosquito aircraft were built in Canley. It also turned out Airspeed Oxfords, Bristol Mercury VIII engines, Bristol Beaufighter fuselages, Beaverette light armoured cars and a 'Jeep' type vehicle.

At the end of the war car production resumed with the Eight and Twelve. It was a busy year for Standard, with the acquisition of the Triumph Motor Company, which was bought out of receivership for £75,000. In the wake of the Triumph acquisition the Standard Motor Company became Standard-Triumph.



In 1948 Standard-Triumph launched the Vanguard, a vehicle inspired by American cars of the time. For a period it was the only model - in line with the company policy of the time - until the smaller Eight was launched in 1953.

In 1954 long-serving boss Sir John Black stepped down to be replaced by Alick Dick. That year the company produced almost as many tractors (61,500) as cars (70,000). In the early fifties a decision was made that Standard would be the name

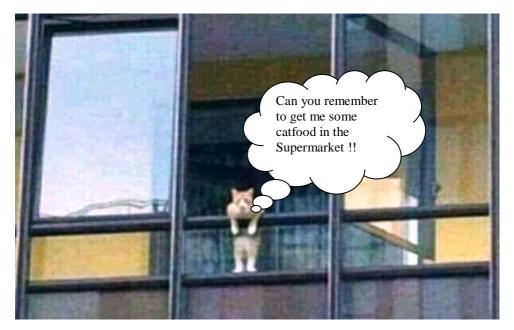
used for saloons while Triumph would be used for sports cars. Triumph was to become the dominant brand after the TR2 broke cover in 1953.

The success of the Triumph marque meant replacements for the Standard Eight and Ten saloons became a Triumph - the all-conquering Herald. This trend was to continue when the last Standard model was replaced by the Triumph 2000 in

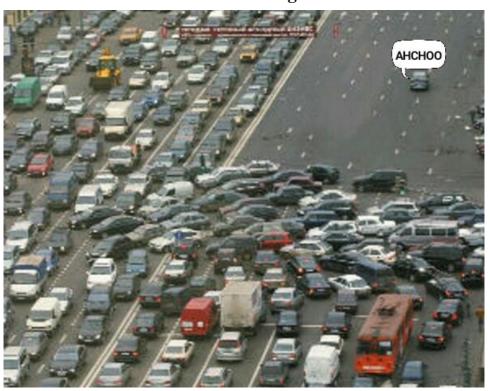


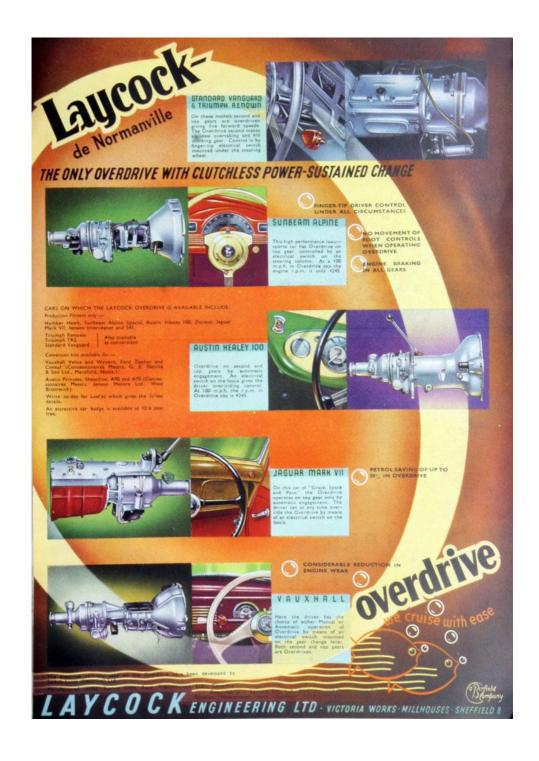
1963. Prior to this, in 1960, Standard-Triumph was bought by Leyland Motors, operating as the Standard-Triumph division. The Canley plant in Coventry closed in 1980, with 'Triumph' production then being concentrated in Solihull.





Social Distancing !!





Overdrive

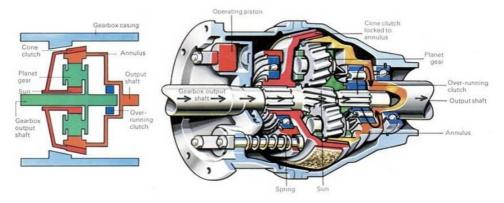
The vast majority of overdrives in European cars were invented and developed by a man called de Normanville and manufactured by an English company called Laycock Engineering (later GKN Laycock), at its Little London Road site in Sheffield. The system was devised by Captain Edgar J de Normanville (1882–1968), and made by Laycock through a chance meeting with a Laycock Products Engineer. De Normanville overdrives were found in vehicles manufactured by Standard-Triumph, who were first, followed by Ford, BMC and British Leyland, Jaguar, Rootes Group and Volvo to name only a few. Another British company, the former aircraft builder Fairey, built a successful all-mechanical unit for the Land Rover, which is still in production in America today.

The first production vehicle to feature the Laycock system was the 1948 Standard Vanguard Saloon. The first unit to be created was the A-type overdrive, which was fitted to many sports cars during the 1950s, and into the late 1960s. Several famous marques used A-type overdrives, including Jaguar, Aston Martin, Ferrari, Austin-Healey, Jensen, Bristol, AC, Armstrong Siddeley and Triumph's TR sports car range, from the TR2 through to the end of the 1972 model year of the TR6. The overdrive would drop the revs on whatever gears it was used on by 22%.

In 1959, the Laycock Engineering Company introduced the D-type overdrive, which was fitted to a variety of motor cars including Volvo 120 and 1800s, Sunbeam Alpines and Rapiers, Triumph Spitfires, and also 1962-1967 MGBs (those with 3-synchro transmissions). From 1967 the LH-type overdrive was introduced, and this featured in a variety of models, including 1968–1980 MGBs, the MGC, the Ford Zephyr, early Reliant Scimitars, TVRs, and Gilberns.

The J-type overdrive was introduced in the late 1960s, and was adapted to fit Volvo, Triumph, Vauxhall/Opel, American Motors and Chrysler motorcars, and Ford Transit vans. The P-type overdrive marked the last updates and included both a Gear Vendors U.S. version and a Volvo version. The Volvo version kept the same package size as the J-type but with the updated 18 element freewheel and stronger splines through the planet carrier. The Gear Vendors U.S. version uses a larger 1.375 outer diameter output shaft for higher capacity and a longer rear case.

In the Laycock Overdrive, the solenoid opened a mechanical valve which allowed oil pressure to reach the hydraulic operating pistons. which were then forced forward by the oil pressure and their movement pushed the cone clutch so that it locked to the casing to engage the overdrive.



The cone clutch had friction linings on both the inside and the outside faces to that it could lock on to either the conical outside surface of the annulus or a similarly-shaped brake ring mounted in the overdrive casing. When locked to the annulus the cone clutch rendered the gear train inoperative and the whole assembly rotated as a single unit, giving normal direct drive from the gearbox. However, when the cone clutch was locked to the overdrive casing, its splines would hold the sun gear stationary and the overdrive would come into operation

The overdrive system applied to a Triumph TR5 operated on 2nd, 3rd and top gear. When engaged, the overdrive would drop the revs from 3000 by 666 RPM, or from 3500 the drop would be 777 RPM to 2723 net. The advantages this reduced rpm had on fuel consumption was most often quite near 22% decrease during Motorway and A Road driving. On jaguars the overdrive only operated in fourth gear. In all cases power to the solenoid was removed to disengage the overdrive when reverse gear was selected.

Over a period of 40 years, Laycock Engineering manufactured over three and a half million overdrive Units, and over one million of these were fitted to Volvo motorcars. In 2008 the U.S. company Gear Vendors, Inc. of El Cajon, California purchased all the overdrive assets of GKN to continue production of the U.S. version and all spares for J and P types worldwide.



Margaret Thatcher was being driven to South Wales to address a meeting of constituency workers. When her car arrived at the Severn Bridge, she discovered the bridge was closed for repairs. "Never Mind" she said to her chauffeur. "I'll walk across"

Politically Correct ??



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1994 Mercedes-Benz S500 Coupe, 109,000 miles, Pearl Blue with cream leather upholstery .Service history. Owned 12 years. Excellent condition. £4,250.

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CLUB EVENTS 2020



April/May Cancelled Due to Unforeseen Circumstances

June ? 6^{th} Brunch Run – The Cottage Inn nr Llandeilo 10.30 on 14^{th} Bluestone Run – Jeff Edwards

20th Bicester Flywheel

24th **SHVR Pub Run -** Pont Abraham 6.45pm

27th/28th Towy Valley Show

July 4th Brunch Run – The Cottage Inn nr Llandeilo 10.30 on

20th SHVR Clubnight Barbecue 25th/26th SHVR Summer Rally

9th **SHVR Pub Run -** Pont Abraham 6.45pm

August 1st Brunch Run – The Cottage Inn nr Llandeilo 10.30 on

9th Gnoll Show

15th Carmarthen Show

17th SHVR Clubnight

27th **SHVR Pub Run -** Pont Abraham 6.45pm

 $\textbf{September} \, 5^{th} \quad \text{ Brunch Run} - \text{The Cottage Inn nr Llandeilo } 10.30 \, \text{on} \\$

6th Pembroke Run

21st SHVR Clubnight

30th **SHVR Pub Run -** Pont Abraham 6.45pm

SHVR

Swansea Historic Vehicle Register

MEMBERSHIP APPLICATION FORM

Membership fee is £20 per year, January to December. This includes a monthly copy of the SHVR magazine available on club nights or otherwise by post. The club organises various events for the benefit of members including, Auto Jumble, Static Displays and Shows, Local Car Runs, SHVR Tour to Ireland, Monthly Club Nights, Summer Barbecue and Christmas Buffet. The SHVR magazine includes Reports on Shows and Events, List of known Forthcoming Events in South Wales, Motoring Articles and Features, Club News and Free Members' Advertisements.

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