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A WORD
FROM
THE EDITOR

Norfolk - a place in the desert

BY MARTYN NUTLAND

The 2005 June/July issue of *Austin Times* appeared in July rather than early June, as in previous years. This seemed appropriate as it then coincided with the Austin centenary.

However this edition is also coming to you in the second month of the cycle.

This is because Martyn has been working for some months on the monthly magazine of The Pre-War Austin Seven Club and some juggling of deadlines has been necessary.

Austin Times tends not to place much emphasis on the Seven. This is a conscious decision because so much material already appears on this model and it seems a good idea to give other Longbridge activity a show, but if you have something you want to say about
(Cont on page 12)

We do not know whether Herbert Austin had a predilection for dancing girls, but it's unlikely to be the reason he handed a spanking new Eighteen to drive across deserts, to someone who did.

Humfrey Symons was a remarkable man; journalist, explorer, motorist *extraordinaire*. It was the second of these roles that set him on the road to Djanet in the heart of the Sahara in search of cave drawings of dancing girls, strange chariots and elephants. They were believed to be the work of the Garamantes who worked emerald mines around the tiny oasis until they were conquered by the Romans in 20 BC

Symons was no stranger to 'strange chariots'. His motoring adventures began in 1929 with a Sunbeam in the Monte Carlo Rally and he continued to compete in this and other international events until 1938 in a variety of cars.

His great epics though started modestly enough in 1935 with some unlikely 'wheels' - a Series II Morris Ten Four - for a trip to Timbuctu by way of Gao and Niger. He had Leslie Seyd, a wine importer, in tow. Seyd raced everything from Austin Sevens to Bugattis and post-war became well known for his Monte Carlo

Rally trips in Mike Couper's Bentley then Rolls-Royce.

But what precisely was the purpose of the run to Timbuctu is not immediately apparent.

Seyd must have wondered this too as it was only after they had left Morris's Coventry Street showrooms in London and were negotiating the Eros 'roundabout' that he asked where they were going and evoked a



Personal touch - Herbert Austin (left) hands over a brand new Eighteen to Humfrey Symons to take across deserts. But why?...



Symons (left) with the Morris Twenty Five he took to Kano. His companions were named Francombe (centre) and Barnes.

reply, that might have sounded a tad sarcastic: 'Timbuctu'.

Nothing much happened afterwards other than the trip enabled Symons to draw the rather non-descript conclusion that the Morris Ten Four was 'suitable for use in any part of the world and can go anywhere that the big high-powered American cars can go and much more economically'.

It also prompted Leonard Lord, who was managing Morris at the time, to ask, somewhat undiplomatically, had they not got sick of the car after driving it 6000 miles in three weeks.

Symons was back at Morris a few months later for a 25 horsepower model to take to Kano in a week. This time the brief was somewhat tighter. He would use the least expensive (£280) car in its class to prove the time taken by boat and train could be halved and the 'fare' cut by more than 50 per cent.

Again nothing particularly untoward happened to the three-and-a-half litre, three-and-a-half ton

Morris as it consumed Shell at the rate of 12-15 mpg and a gallon of Duckham's oil every 3000 miles.

Symons and two companions got back on New Year's Day 1936 and *Autocar's* H S Linfield scooped a toad test, which couldn't have done much for our hero's reputation as a journalist because by then he was writing for either *The Times* or *Sunday Times*.

Part of the Austin's 'un-ditching' gear featured these rope 'ladders'.

Exactly what his capacity was is difficult to ascertain. Bill Boddy writing in *Motor Sport* in 2000 (Humfrey Symons - Motoring Adventurer) has him as the daily paper's motoring correspondent having moved there from the post of sports editor on *Motor* in 1931.

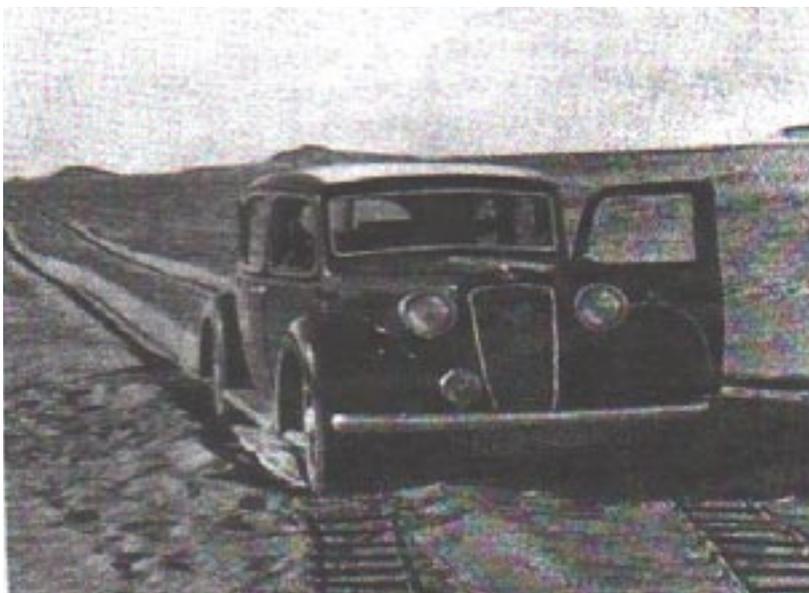
Contemporary issues of *Autocar* describe him as the Sunday's motoring writer while my own research only confirms that he wrote 'Motor Notes' for the *Sunday Times* in the 30s.

In any event the Morris trips resulted in a lecture to a distinguished audience at The Royal Geographical Society, of which he was a Fellow, in 1936, complete with 'lantern slides' and Morris publicity films.

The dapper, balding gentleman from Leatherhead, now aged 37, had firmly established himself as that motoring adventurer. But what happens next is particularly interesting in the light of subsequent events at Longbridge.

Symons wrote in February 1937 to Rolls-Royce asking for a car to drive to Nairobi and Kenya and back. The then managing director, Arthur Sidgreaves, was extraordinarily enthusiastic about this bizarre project and the company became absurdly committed.

Symons's written proposal was masterly. He



would obtain maximum press, radio and film publicity at home and overseas and particularly in 'the British Empire on the African Continent'.

And then, with shades of his approach to Morris – he would demonstrate travel in Rolls-Royce comfort was available at half the cost and took half as long as the equivalent journey by train and steamer.

Quickest

There would be no suggestion of record breaking, nothing not in keeping with Rolls-Royce traditions and dignity. 'The impression we will spread is that to a Rolls-Royce such a journey is "all in the day's work".'

And so it goes on. The quickest 'through' motor journey ever accomplished; a Rolls-Royce is as suitable for desert tracks as it is for good roads and appropriate for ceremonial use by governors of provinces; no part of the route of a 'chassis breaking character'; given ordinary care, everything achievable with no trouble whatever'.

Stories were to be placed with the London and provincial newspapers and those in India, Australia and New Zealand. The *Sunday Times* and *Daily Sketch* were said to be going to serialize the adventure. Five leading South African papers wanted the story as did the papers in Algiers and the *Nigerian Daily Times*. Press releases were to be issued based on cables sent by Symons and these were expected to be used by Reuters and the Press Association.

Governors

The BBC were to be involved and would not be 'averse to mentioning the name of the car in Empire broadcasts'. And there would be a 'really good' travel film showing the Rolls-Royce 'among pygmies', in the jungle and in the Sahara. It would also be shown to the governors of the colonies encountered en route and to 'other influential people'.

The car chosen was Phantom III 34 EX and H F (Hoppy) Hamilton was recalled from the Experimental Department at Chateauroux in France to prepare it and accompany Symons.

Detailed negotiations started with Dunlop over special tyres and at one point double rear wheels were contemplated which seems to cut across much of what had gone before.

Once Hamilton had the car in the Experimental Workshops at Derby the radiator was modified, extensive refinements made to the valve gear, stiffer rear springs fitted, the axle shafts changed, brakes relined, the clutch fitted with tougher linings and the wheels sent to Dunlop for rebuilding.

The body and chassis was modified not only to provide sleeping accommodation for the travellers but to carry extra water and fuel. The bonnet was louvred, a high speed fan and extra petrol pumps fitted and Fortnum and Mason prepared some food.

Finally, an astonishing quantity of spares and tools was crammed aboard. These included copper wire – thick, copper wire – thin, iron wire, aluminium sheet, iron sheet, six fan belts, *eight* sets of valve springs, a piston and connecting rod, a front road spring, a complete set of hand tools other than those supplied with the car, some soap and...a wiring diagram.

The boss

Considering its inappropriateness for the job - head of 'Experimental' W A Robotham had said he could not 'think of a more unsuitable car to use' – the Phantom III did exceptionally well.

But Symons was paranoid about being stuck in soft sand and insisted, contrary to the advice from Dunlop, on reducing the tyre pressure to 20 psi or less, then neglected to re-inflate them when firm track had been regained. Because of the weight and speed capability of the car the walls collapsed.

This soured the whole trip.

Symons cabled Sidgreaves to have tyres flown out by Imperial Airways.

The boss was not impressed. He passed the request to Dunlop quoting from Symons's message: 'Every tyre burst. Unable to move unless six covers and tubes sent immediately by special aeroplane to Fort Lamy. Car running splendidly. Great pity if unable to achieve object owing to inexcusable tyre failures'.

Sidgreaves signed off: 'What I really want to



A contrast in modes of transport. The Eighteen Norfolk, in the desert with two of 'the locals'.

of 34 EX detailing problems principally, with the transmission shaft, shock absorbers, brakes, suspension and steering, even down to remarking that after 8000 miles some of the body mounts broke away allowing the body to

know is why we have had this tyre disaster which has ruined the trip'.

Eventually an airliner flew in the replacements and Hamilton changed them single-handed in a temperature of 115° F. Symons and the third crew member, H B Browning, pumped them up.

Browning is interesting. He is sometimes described as a photographer. But this is Bertie Browning and any skills with the camera apart, he was a well-established and respected rally driver, especially on snow.

The tyre pressures were never reduced again and there was no further trouble.

They motored slowly on the way back filming for a presentation Symons intended to make to The Royal Geographical Society.

But as was sometimes his won't the leader was now bored with the trip and Browning seriously ill with black water fever. At Algiers they both took an aeroplane home and left 'Hoppy' Hamilton to bring the car back.

A dismal and ignominious end for the Rolls-

Royce after an ordeal of well over 10,000 miles, compounded by the fact that it sheared a universal joint a mile from the Works and had to be towed in.

Robotham and Hamilton wrote a comprehensive report on the performance

move about and damage the aluminium surrounding the rear bumper irons.

A two part article appeared in *Autocar* but little else of the much vaunted publicity seems to have materialized. The magazine piece in late May and early June 1937 gave little credit to Hamilton on whose efforts what success there had been largely hinged. For his part 'Hoppy' complained of suffering a bout of malaria, annually, for the rest of his life.

I make no apology for going into this amount of detail on a non-Austin trip because it serves to point up the outstanding achievement of what some might regard as the inferior Eighteen on what was a much more gruelling adventure.

But before we look at the details let us consider what circumstances may have pre-empted its departure from Longbridge.

I have often alluded to Sir Herbert's aspirations in the luxury car field, but surely even he, who



The writing on the rock face (far right) offers advice, not visible to the Eighteen's driver, on keeping in low gear.

would have been aware of the haunting saga of the Phantom in the desert, could not have wanted to expose one of his luxury cars to a similar experience.

So was he the 'victim' – like Sidgreaves – of one of Symons's letters. Or was it that Leonard Lord, now heavily involved with Austin, but who had signed off the relatively easy Morris trips and, always the inveterate publicist, was seduced by a similar stunt in an Eighteen.

The car chosen was the Norfolk which used the 'short' (9') chassis fitted with the familiar six cylinder side valve engine of 2,500 cc.

'Guinea Pig'

It was fitted with additional water and fuel tanks and carried Symons's preferred selection of 'unditching' gear – planks, rope ladders, shovels etcetera – but there is no evidence that EOB 504 received any modification at the Works. However the sunshine roof was painted white which may have been to reflect the scorching sun or to aid location from the air.

Extra Low Pressure (ELP) Dunlops were fitted and the car was 'guinea pig' for a trial of Castrol XL.

After running-in on the drive through France, Symons and his companion, one E B Haynes, headed south from Algiers towards Biskra via Bou Saâda. They had spent the morning in the Algerian port making 'official calls', presumably on the local agent and to promote the still spot-less EOB to dignitaries.

Short Cut

The Austin made short work of the Atlas Mountains, reaching Bou Saâda, 150 miles away, in four hours.

From Biskra it was down a rough track to Touggourt remembered by Symons for the 'amazingly luxurious' hotel and the biggest market of the year. Then a leisurely drive to Ouargla and a delay waiting for the French (it was ever thus) to sign permits for travel further south.

It was at Ouargla that things started to go wrong. Symons met a Foreign Legion captain who advised taking a short cut through the Kranfoussa Dunes to save 100 miles on the run to Port Polignac.

Reassured by the knowledge that the soldier was sending two special desert cars that way the next day the Austin set off, missing later cognizance that the way was impassable. Incidentally, one of the desert cars broke two transmission shafts in one day.

The Eighteen made a good start putting 90 miles into the first day. The next morning though she failed to make an up grade and was stuck for 24 hours having recorded just 0.2 miles on the odometer.

The next day just eight miles were achieved after the car needed a causeway built for it to power out of a river bed. While the *coup de grace*, a few hundreds yards from Port Polignac, was having to unload the car in a temperature of 110° F and a blinding sandstorm and carry the contents to firm ground. The Austin could then be driven out of the dunes with just 14 pounds in its tyres.

EOB was the first vehicle to have driven through the Kranfoussa dunes in six months.

Not Touched

The previous attempt had needed a rescue expedition from Port Polignac and as Symons and Haynes arrived, preparations were being made to send out a Camel Corps search party with rations for 14 days.

We don't know whether Symons simply got bored with this trip but at Fort Polignac he turned round and began a blind for home. The excuse was he had to be in Harrogate for the RAC Rally, and the run was certainly fast – out-stripping purpose built French army desert cars.

Did Austin get their money's worth. The 800 mile run from Algiers took five-and-a-half days, an excellent time, and Symons said that out of all his desert crossings the conditions for the Austin were the most gruelling.

EOB was the first British car to penetrate the 300-mile wide wastes of the Grand Erg Oriental and Symons descriptions of climbing rocks to try and spot the next track marker, then belting towards it with jagged, half-submerged boulders denting the sump and fuel tank, and of sand winds thick as London fog, is all evocative stuff.

The fact that of all his expeditions, this was the only one on which the spares were not touched is also impressive.

Many years after, the late Wilton J Oldham, who was an expert on the Rolls-Royce Phantom and formally an enthusiast for six cylinder Austins, bar the ER/ET series Eighteens of 1937/9, for which he seems to have an irrational aversion, describing them as 'looking terrible' and 'hideously bulbous', wrote of the escapades.

'Having read the reports of the trip with the Rolls-Royce Phantom III,' he said, 'and on the other hand seen the reports made out by the Experimental Department at Rolls-Royce Ltd., Derby, also, having heard what 'Hoppy' Hamilton has to say about the trip to Nairobi, which casts rather a different light on the whole affair, I cannot help being sceptical about the report of the trip with the Austin Eighteen'.

Fudging

Wilton, his nose obviously put out of joint by what happened to the Phantom, is disingenuous, to say the least, about Symons's Austin adventure.

He goes on to surmise, incorrectly, that 'The Austin Motor Company, never referred to it again in any sort of publicity'...and adds, 'I just wonder if it was, in fact, almost as disastrous as the Phantom III run'.

The *Austin Magazine* ran a three-part, extensively illustrated, feature on the trip in June and July 1938. It has to be said that there is a little bit of fudging over the non-arrival at Djanet.

Temperature

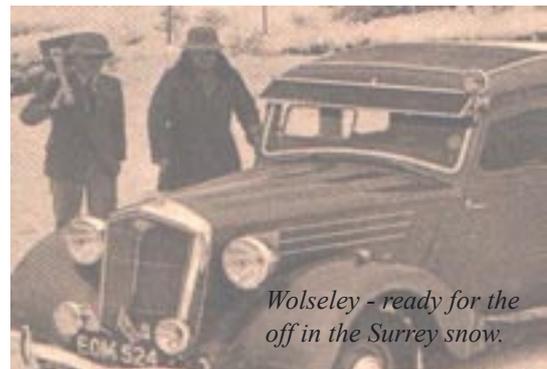
While the full page Castrol advertisement that features Symons's endorsement of XL – *'on one occasion (the temperature) reached 116 degrees and the engine was consequently running at high temperature most of the time for long spells in low gear. I am glad to say that the oil consumption of the Austin Eighteen was absolutely nil over a distance of 4000 miles and the pressure never varied throughout'* – includes a map showing termination in Djanet!

All that said, Symons was not asked back to Austin and he next turns up at Wolseley's door in the harsh winter of 1938/9. This time it's for the 18/85 model, a 2.3 litre car that just saw the light of day before the War began.

What Symons intended is not absolutely clear. Some authorities (Boddy in 2000) suggest a London-Cape Town record. *Motor* at the time plumb for an African road survey establishing a year-round trans-continental route with the rider that this was to be attempted over 17-days.

He set out just before Christmas accompanied, again, by Browning. The car carried most of the usual gadgetry plus the latest Symons innovations which included a Primus stove that could be filled by connecting it to the engines fuel pump, three-piece front seats that folded into beds, a mosquito mesh over the sun-roof aperture and an adjustable sun visor above the windscreen.

The tyres also contained a self-sealing fluid mooted, by the way, for the Rolls-Royce. Browning had a reputation (source probably 'Hoppy' Hamilton) for dozing off at the wheel. Whether this occurred on the Cape Town project will never be known but while well on



schedule and with Symons asleep beside him, he left a Bridge at Gada between Tapili and Niagara.

The car plunged 30 feet into crocodile-infested waters but Symons scrambled from the almost submerged Wolseley and got Browning out too, whereupon they swam ashore.

The 18/85 was recovered and continued, but hopes of 10,000 odd miles in 17 days were drowned.

Symons last great adventure did not involve those 'strange chariots'. It took the man who once told Austin that he preferred to face hostile natives with 'a friendly handshake and a smile,' rather than weapons, to Dunkerque.

He had become a flight lieutenant in the RAFVR serving as a spotter in observation balloons. Although he escaped from the débacle on the beaches, Humfrey Symons, motoring adventurer, was lost on the way home.

Fine tune, but punters still whistled the scenery



THAT LEADING exponent of the Austin Twenty Eight Ranelagh, rarest of all pre-war Austins, Vic Hind, had always been of the view that no coloured literature exclusively for this short-lived model was produced.

However, at the Cofton Park Austin Centenary extravaganza he came upon just such an item.

The brochure was issued in January 1939 when the price of this enormous car had already suffered a staggering price reduction from the 1938 launch tag of £700, to £595.

Previous literature had been duo-tone – black with a blue tint (Publication 167) - but what is more interesting is that by 1939 Longbridge were trying to re-position the Ranelagh in the market-place.

Realistically this was only ever going to be a chauffeur driven car or one for formal occasions with municipalities, the *crème de la crème* of hire car firms or major undertakers like that operation within the Co-operative Society.

But the new booklet sought to bring the four litre, 17 foot long Twenty Eight to the notice of the owner-driver. 'This impressive model, the latest triumph of the Austin designers, is already establishing itself as a luxury town carriage for

the family and a limousine for the discriminating business man who requires a fast and dependable car' waxes the brochure which is adorned with colour plates of the car in an opulent setting and of its sumptuous interior.

It goes on to say between covers that represent the walnut detailing of the interior '...an owner may often be seen personally sampling the quiet pleasure of driving this high-powered car; it asks for so little effort and in return gives so fine a performance'; after we have already been told: 'Whatever the occasion or distance, the Ranelagh owner and his family or guests will arrive rested and unruffled'.

This is a considerable departure from the stance a month earlier when Austin were advertising the car over a full page in Autocar.

'(The Austin Twenty Eight is)...news wherever chauffeurs gather to compare notes and admire' and the text is accompanied by a picture of a group of liveried drivers closely inspecting the model.

That the Ranelagh was not taking off is perhaps indicated by the fact that the publicity department found it necessary to place a full page 'ad' at all, so soon after the car's launch



The Ranelagh had in-built hydraulic jacking operated from the driving compartment.

at the October 1938 London Motor Show. And they were already paving the way for a change of course – ‘Owners, who may sometimes wish to drive themselves, will find both the steering and synchromesh gear change delightful to handle’ declares the spread.

By the time the coloured brochure appeared the finishes were being given more prominence and the full Austin range being offered, including the somewhat unlikely options for such a car as ‘Princess and Bluebird Blues, Ash Grey and Pueblo Brown’.

This is interesting. It is often a sales department ploy when trying to revitalize a flagging model, to introduce a new colour or trim level.

When the Twenty Eight was launched the

Salesman’s Pocket Guide to the cars gave him only three colours to offer the customer – ‘Royal Blue, Deep Coach Green and Black. Normally such a limited selection was confined to the bottom of the range cars – typically the ‘fixed head’ (i.e. non-sunshine roof) Ruby, Big Seven, Cambridge, Ascot and Goodwood where the choice was blue, black or maroon.

As there can be no suggestion the Ranelagh was an ‘economy’ model we have to conclude that only colours suitable for a formal carriage were, at first considered necessary and the expansion came somewhat in desperation and in a bid to ‘shift the things’.

It was of course all to no avail. Under 300 of these supremely elegant cars found homes and it is fairly safe to assume that hardly any of those would have gone to private owners.

We’ve discussed in the past and at length Austin’s problem with luxury cars and the balance between image and cost. It is conceivable they could have done better with the Ranelagh if there had been a genuine owner driver version i.e. no division and five not seven seats and if they had released a sizeable number of chassis to the bespoke coachbuilders who created such attractive examples of some of Longbridge’s other large cars.

There is still much research to be done on the Austin Twenty Eight. Just how many survive is not clear. Vic Hind has one and there is another immaculate example known to him. Some remains of a third exist, but where the others



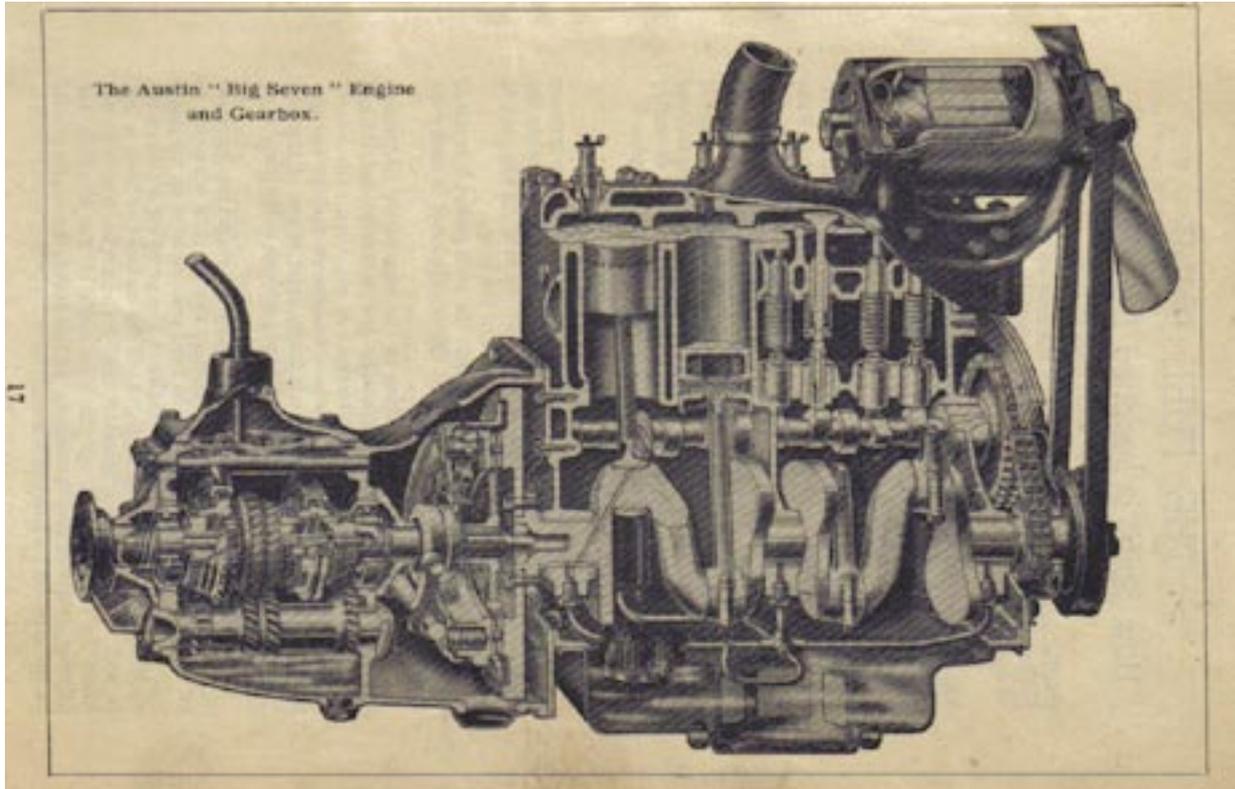
went and if any are extant is largely unclear.

We know from newsreel footage the British government had some as ministerial cars but traceability is difficult.

The Co-op funeral service certainly had others but the records are not preserved. It is possible foreign embassies had a quota, but again, this is not easy to establish.

Likeness that was skin deep

THE EDITOR COMPARES THE BIG SEVEN AND AUSTIN EIGHT ENGINES



IT IS SURPRISING how many people - amateurs and professionals alike - believe Austin Big Seven engines are virtually identical to those of the Austin Eight, and, if you are mindful the Big Seven's coolant intake, on the right hand side of the block, is noticeably different in shape, you are dealing with interchangeable units.

In reality the Big Seven is radically different from the Eight and very little can be swapped between the two.

One of the reasons for the misperception is the Big Seven engine was radically different from that of the old Austin Seven and it was very much in the mode of the Austin Eight and all the very non-vintage combined block/crankcase motors which followed - Ten, Twelve, Fourteen and so on.

So let's take a look at the bottom of the

engine and work upwards.

The sump is completely different. The Eight uses a one piece 'pan' with a long shallow section at the front to clear the axle while the Big Seven needs this section to be less than half the length. Even more striking is the latter has a circular cover, secured by six 3/16 BSF nuts in the centre underside to allow the oil strainer to be removed. The drain plug on the Eight is at back centre and angled downwards, on the Big Seven it is on the flat section of the rear right underside. The whole component on the earlier car is secured by 16 3/16 BSF bolts and by 17 1/4 BSW on the latter.

The external differences to the sump make for departures inside. Quite obviously the Big Seven's oil strainer needs to sit on the removable cover. It does so on spring steel feet which compress it against a sheet steel tray sloped

so oil is channelled towards strainer and sump. It also closes off the crankcase section of the block and is secured to its walls by a further six 3/16 BSF bolts.

The Eight needs no such tray but has a baffle spot-welded to the sides of the main part of the sump, aft of the shallow forward section. A portion is cut out (as on the Big Seven's tray) to allow the dip-stick to pass through, but also to accommodate the oil pump assembly.

This is the next major difference between the two engines. The Big Seven oil pump is superficially similar to that of the traditional Seven being of bronze. But it is bigger, of a gear type, rather than vane, locates on studs in the base of the monobloc instead of by bolts to a web in the top of the separate crankcase, and has the fasteners for the bottom cover locked by wire rather than spring washers.

Longitudinally

But the most striking difference between this pump and that of both the old Seven and the Eight is the way it is 'plumbed' into the oiling system. Standard Sevens, of course, don't have pressure lubrication, the pump simply raises oil to a gallery where gravity and splash take over.

The Big Seven's pump though delivers at pressure to a copper pipe running longitudinally along the centre line of the engine. There are separate take-offs to each main bearing and a smaller bore pipe from the union serving the centre one is led away to a connexion for the oil pressure gauge.

Modified

The Eight's oil pump is in the same location as that on the Big Seven but is a more substantial looking unit and has the main body totally enclosed in a cylindrical filter of fine metal gauze.

Rather than supplying each main bearing individually the pumps feeds a gallery running the length of the engine's right side and drillings take the oil to the main bearings and elsewhere. Both pre-war models ran at about 25 psi under normal conditions but post-war the Eight was modified to operate at between 30 and 40 pounds.

Finally, the Big Seven has an adjustable

pressure relief valve in the manner of the Seven and in broadly the same location outside the engine on the left side. Pressure relief on the Eight is dealt with internally.

Both the Big Seven and Eight have the union for the pressure gauge on the right side of the unit, but the former's is further forward, and, as we have seen, needs an internal feed from the centre main bearing as there is no oil gallery to tap into. And thus it is conclusively established that even the blocks are not the same.

Moving to the heart of the engine and the crankshaft, it will already be obvious that this component is not interchangeable. The Big Seven's main bearing journal and crank pin sizes are smaller as evidenced by the earlier car having a fractionally shorter stroke (88.9 mm as opposed to 89). The difference in stroke, of course, would not effect the interchange of connecting rods per se, but the crank pin size most definitely does and none of these components can be swapped.

Even if this were not the case, the lubrication arrangements would preclude changing cranks-hafts and blocks. Quite apart from the Eight relying on an oil gallery on the right side of the engine, the Big Seven's main bearing caps have to be tapped to take the oil connections. This leads to a further minor discrepancy.

Higher Up

The Big Seven has each pair of main bearing nuts secured by a locking plate perforated for the oil pipe. The Eight, more conventionally in this location, can use pinned castle nuts.

Before moving higher up it is worth taking a look at the ends of the engine.

The Eight's front mounting plate is radically different in shape from that of the Big Seven but here adaptation should be possible although it would involve welding and/or shaping and cutting fairly thick (4mm) steel.

The rear end plates are very similar although, because neither engines have mounting points at the back - the tail of the in-unit gearbox is used for this purpose - the Eight resorts to pressed steel where the less cost-conscious Big Seven sticks with heavy steel plate!

Both Eight and Big Seven flywheels are the same diameter and follow the same design

principles i.e. flange fitting, 81 tooth ring gear. However, the clutches were different so the facing for the Big Seven's driven plate is wider and of greater diameter and the holes for the cover retaining bolts in different positions.

At the front there is better news. The nose of both crankshafts is actually the same diameter and length and the pockets for the Woodruff keys which engage the timing sprocket and fan pulley are identical.

This means sprocket and pulley are

interchangeable although it is worth noting, because of the different lubrication arrangements the 'Seven' camshaft sprocket needs an integral oil thrower which is not always incorporated in this item from the Austin Eight.

The 'Eight' also uses the synthetic 'rubber' ring between the two rows of teeth on the camshaft

sprocket supposedly to silence and tension the chain. Wisely the Big Seven has nothing.

The pressed steel cover for the timing case is physically the same on both engines but the bolt holes are in different places!

Moving upwards, pistons, gudgeon pins, valves, valve springs and guides are all transferable. However, valve actuation is radically different. The Eight uses barrel type tappets with the adjusting screw locked by a plain nut.

The Big Seven follows traditional Seven (and earlier Austin pre-war) practice and employs a rectangular tappet block working in a guide inserted in the base of the tappet gallery. The guides are retained by 3/16 BSF screws inserted in their housings and the tappet adjusting screw is locked by a split, conical shaped nut, again, in the mode of the Seven.

A hole drilled through housing and guide bleeds oil from the tappet gallery onto the reciprocating tappet block. On the Eight there is no

separate guide to be retained and thus no threaded hole for a screw. The drillings simply pass oil onto the barrel pattern tappets.

Interestingly, the tappet blocks, adjusting screws and lock nuts from a Seven fit the Big Seven!

Moving to the very top of the engine the two cylinder heads are identical as are the methods for mounting the dynamo and adjusting its drive belt. Which brings us conveniently to the other external features of the two engines.

On the left side, the downdraught Zenith carburettor may appear identical to the Eight but it's jetted completely differently. The Big Seven uses a number 23 choke in conjunction with a 90, 50 and 60 main, compensating and slow running jet, respectively. The equivalents for the Eight are 19, 70, 60 and 45.



The Big Seven's valve clearances were set hot at 0.004" whereas the Eight's adjustment was cold and to 0.012, all valves in both cases. And this can be viewed in the light of the earlier design opening its inlet valve at TDC with the later version opening at 5° BTDC and closing its exhaust valve at 8° after.

The air cleaner was generally the same on both engines - an oil wetted AC of drum shape - although later Eights tended to use the cylindrical T Type similar to the model adopted by the larger side valve cars. But the mechanical Type T fuel pump, also of AC manufacture, is the same on both Big Seven and Eight.

The inlet/exhaust manifold is different on the latter in that the flange to the exhaust downpipe is triangular with stud fixing, whereas the Big Seven has a square coupling like the Seven. Early cars certainly had studs and brass nuts but some examples may appear with bolts.

Both cars use six volt electrics and very similar dynamos but purists will wish to note the Eight had a rather inelegant composite pressed steel fan whereas the Big Seven should have an aluminium 'propeller' shaped job in the style of the Seven. To achieve this, of course, the front of the dynamo, which carries the fan, needs to have the correct flange, and this effects interchangeability.

On the right side of the engine the most noticeable difference is the coolant inlet which on the Big Seven is much longer and rises towards the rear of the block at a shallow angle. The component on both units is of aluminium although on some Eights - Ward Department

engines, for instance - it can be of steel.

Oil filler tubes were identical but the Big Seven uses the Seven style dip stick which has a small sphere at the engine compartment end rather than the 'ring pull' of the Eight.

The Lucas starter should be interchangeable.

The Big Seven engine was finished in black with a red fan with the Mazak (carburetter), aluminium, copper and brass items clean but not shiny. Eight units were painted in the company's distinctive shade of green with the same detailing.

(Cont from page 1)

A WORD...

the Baby Austin it will find an appreciative home in the columns of the Club magazine.

Finally, as you have journeyed through the pages of this issue of *Austin Times* you may have noticed there are a few small stylistic changes.

This is because we have been reorganizing both the computer software and hardware on which your newsletter is produced.

All I can say on that subject is even the more complex elements of an Austin seem as simplicity itself by comparison!

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This charming period photo depicts a Norfolk in all its glory. A bottle of champagne to anyone who can identify the handsome young gentleman standing behind the car. No clues other than to say he is now a prominent member of the Austin movement and the hairstyle hasn't changed that much!