

CRANKING

The Wessex Stationary Engine Club's Monthly Newsletter

May

2013

Thirty sixth year
of publication

[www.wessex](http://www.wessex-sec.co.uk)

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From the Sump

The crank up at Nunney Catch Transport Café on 21st April was extraordinarily successful. It was in that patch of really nice weather and about sixty or so of Wessex members, friends and relations were there in the warm sunshine, displaying over thirty engines. Now, this venue is one we have used for many years – I exhibited my first engine there in 2000 – and the café opens on a Sunday just for us. This time – despite a big turn out of warm bodies – they had their worst crank up day ever. The committee considered this at the May meeting and although there was some discussion about the internal changes to the café resulting in less seating, in fact they could have got us all in out of the weather – so not that. There was some resistance to buying raffle tickets if the raffle was going to be held as usual around 1,00, so we brought it forward. The result was that many turned off their engines then and rather than restart them, packed up and went home without buying the midday meal they otherwise would have done!

Therefore, the raffle time will revert to its former time at Nunney in the hope that people will buy food from the café. It is their site and if they ain't flogging us nosh, they may as well stop home and we've lost the venue. Your assistance in this is – as they say – sought!

The briefly named Vintage Vehicle Rally and Family Fun Day held at The Udder Farm Shop at East Stour SP8 5LQ on Saturday 27th July is run to raise funds for of the Salisbury Hospice and CLIC. It is usually well attended, a good day out and tractors, vintage and classic vehicles and engines are sought. However, I am asked to point out that there is an entry fee for exhibitors of £5. It is not per engine, you understand, but per exhibitor so ten engines are as cheap as one! The monies thus gathered go to the charities, not the organisers and public entry is free. There may be those amongst our members who feel that this is back to front, but there you are....

The redoubtable Eric Gay in his search for raffle prizes has drawn a blank amongst the shops and retail outlets in the area. Not one firm gave him the courtesy of a reply this year. He therefore asks for contributions from the members for the Rally raffle in June. Please do give what you can.

Moving the Metal

For sale

ALCO WW2 300 watt generator. In frame.

BSA generator in frame.

BSA powered winch.

Bradford. On trolley

Coventry Climax 4 cyl. WW2. Generator. Trolley.

Coventry Victor Cub Diesel flat twin on road trailer.

JAP powered. WW2. *Lyon/Norman type* in air drop frame. Switchboard

Lister A or B ? (104/10?) Skids.

Lister D. Various conditions.

Lister powered sawbench.

Petter A1. good order.

Ruston Hornsby 8hp, PB type. (T8V41/2) Hopper cooled. Skids.

Villiers x 2.

Various sets of wheels and axles plus oddments.

Water Pumps and vacuum pump.

Full scale steam powered pump.

Cromwell 3,5" Lathe, screwcutting with change wheels.

Four engines and some wheels were sold from the last advert. I got the impression that whilst they are dry stored, it is a long time since anything was run. Prices by negotiation. Mr Craddock lives at Wedmore Farm, Pewsham near Chippenham.

Phone 07801539533

Lister 1948 28 DH, s/n 1/17438. Rocker gear dismantled but all parts available. Turns over with compression. Ex milking parlour, no trolley. Needs restoring but probably never been apart. Dry stored. With factory handbook. Frome area. Open to offers but £650 on as a starting point!

Phone John 07517 036026

Milk Bottle collection. One hundred and eleven 1980's bottles with adverts on Must sell as one lot. Photos, details – p.lovering@btinternet.com
Phone Paul Lovering, BoA Wilts. 01225 862100

WANTED

Ball Bearing Race 2.5" o/d X 1" i/d X 0.75". Any reasonable condition. Also Chain guard (with integral chain tensioner) for diesel engined Howard GEM cultivator' Call Peter on Bath 01225 874043.

Wiko or Lucas RS1 Magneto, counter-clockwise on cog drive end.

Phone Terry Williams 07845 137796

Articles, cartoons, photos etc are always very welcome – this is not a one-man band, but an expression of all our thoughts and experience. Submissions should be preferably typed or word-processed or even handwritten, (if brief), - it is the content we're after, not the grammar or spelling, so please don't feel your efforts will be ignored. The editor reserves the right to change, edit, augment or lessen your Deathless Prose and asks all to note that opinions expressed in this newsletter may or may not represent club policy

Phone - 0117 964 6818

J. Kim Siddorn, 9, Durleigh Close, Bristol. BS13 7NQ or by e-mail to kim.siddorn@blueyonder.co.uk.

Featured Engine 74

Spark Plugs – a brief History

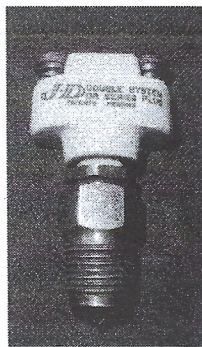
The earliest demonstration of the use of an electric spark to ignite a fuel-air mixture was in 1777 when Alessandro Volta loaded a toy pistol with a mixture of marsh gas and air, corked the muzzle, and ignited the charge with a spark from a Leyden jar. The military were interested, but nothing came of it.

In 1860, French engineer Jean Lenoir created what most closely resembles the spark plug.

The evolution of the spark plug came about as a solution to the problem with early flame and igniter ignition systems. Mica, stone and different kinds of improved porcelain have been used as insulation. A lot of early forms of porcelain suffered badly with the temperature reversals from exhaust to induction and cracking might lead to hard ceramic materials dropping into the cylinder, an undesirable situation.

Some materials were very porous and absorbed oils and soot easily. Early petroleum products were not highly refined and varying amounts of oil were to be found in solution.

In 1915 a major improvement in porcelain was the "775" porcelain, by the Frenchtown Porcelain Co. in

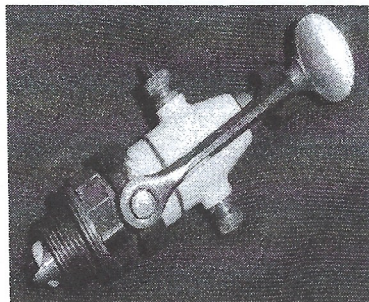


the USA. This porcelain would hold up to heat changes with less absorption of oil. Dr. Joseph Jeffery's discovery of Sillimanite in 1933 was a major improvement in porcelain design, giving spark plugs a longer life and improvements continue.

For many years, stacked layers of mica

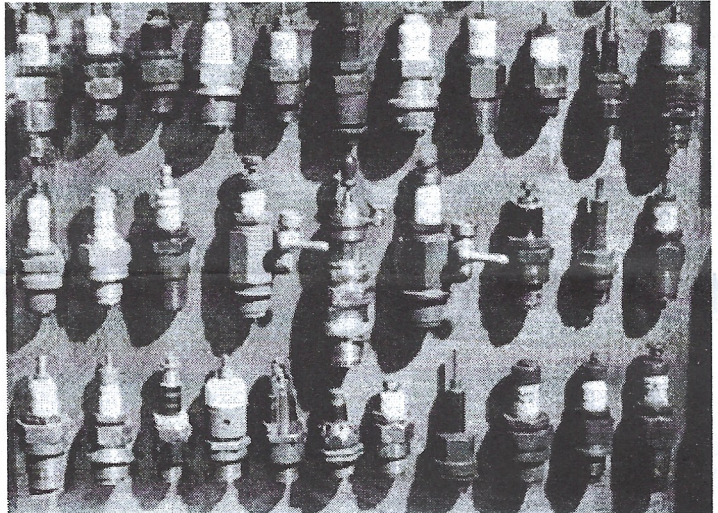
were used with great success although the material is not long lived in these surroundings. Mica insulated plugs were fitted to the Bristol Pegasus Engine that flew over Everest in 1933.

Modern electrodes are typically high-nickel alloys, while the insulator is generally made of aluminum oxide ceramic and the shell is made of steel wire.

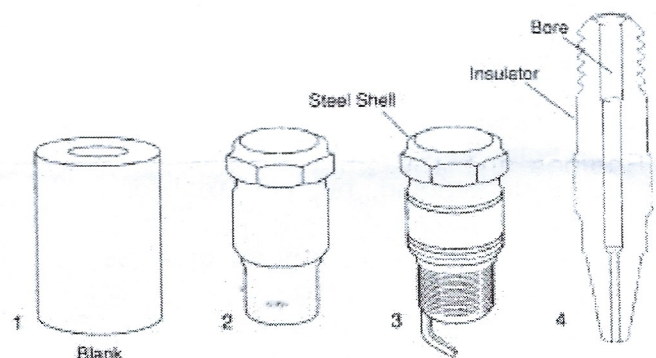


Selection of materials for both the electrodes and the insulator have consumed much research and development time and cost. One major spark plug manufacturer claims to have tested 2,000 electrode materials and over 25,000 insulator combinations. As electrodes erode, the gap between them widens, and

it takes more voltage than the ignition system can provide to fire them. High-nickel alloys have been improved and thicker electrodes have been used to reduce engine performance loss. In addition, precious and exotic metals are increasingly being used by manufacturers. Many modern plugs feature silver, **gold**, and platinum in the electrodes, not to mention centre electrodes with copper cores. Silver has superior thermal conductivity over other electrode metals, while platinum has excellent corrosion resistance.



Insulator material also can have a dramatic effect on spark plug performance. Research continues to find a material that better reduces flashover, or electrical leakage, from the plug's terminal to the shell. The breakthrough use of Sillimanite, a material that is found in a natural state and also produced artificially, has been succeeded by the use of more heat-resistant aluminum oxide ceramics, the composition of which are manufacturers' secrets.



One major manufacturer's process for making the insulator involves wet grinding batches of ceramic pellets in ball mills, under carefully controlled conditions. Definite size and shape of the pellets produce the free-flowing substance needed to make a quality insulator. The pellets are obtained through a rigid spray-drying operation that removes the water from the ceramic mixture, until it is ready for pouring into molds.

Spark plugs remain the one thing that it is easy to fix, so, if it doesn't go. Try changing the plug!

Calendar of Events

Key. CN = Club Night. E = Event

May 25-27th E. Selwood Rally. Southwick Nr Trowbridge.

Forms from Mrs Pearl Francis, 45, Stonebridge Drive, Frome, BA11 2TW. <http://www.selwoodvintage.co.uk/page6.html>

June 8/9th E. West Bay Rally. Phone Matt Scadding 07948 579841

June 15/16th E. Wessex Midsummer Vintage Gathering. Our club rally at Semington.

June 22/23rd E. 28th 1000 Engine Rally, Astle Park.

June 24th CN. In House Member's Quiz.

July 7th . Bristol & SGSEC Annual Rally. Frog Farm, Coalpit Heath. BS26 2QT. Contact Wendy Newton, 24, Rockside Gardens, Frampton Cotterell, Bristol. BS36 2HL

July 13th E. Chilcompton Funday. Phone Andy Cassidy 01761 232862

July 20/21st E. West Oxen Steam & Vintage Show.

Ducklington, Whitney, OX29 7TY (off junction of A40/A415) Info: Mrs. Anne Harris 01367 810415

July 21/22nd E. Much Marcle Steam Rally. Rye Meadows near Ledbury. HR8 2LX Phone, Dot Pullen, 01531 633664

July 28th (Sun) Crank Up at Frank Nash's cider farm at West Pennard. Phone Brian for details

July 29th CN. Crank Up At The Court Hotel

Aug 19th CN. Early Because Of Bank Holiday.

Film show. "Morris Cars in the Early '30s" by Colin Baker.

Sept 30th CN. "Engines at the 1000 Engine Rally" by Kim Siddons.

Oct 5th (Sat) Skittle Match At South Parade Frome

Oct 12th (Sat) E. Wessex Autumn Sortout At Cranmore Railway Station.

Oct 28th CN. Dorset & Somt Air Ambulance

by Colin Thomas.

Nov 12th (Sat). Enstone Autumn Sale. info: Mrs. Anne Harris 01367 810415

Nov 25th CN. Photo Night. Bring 10 Photos, hard copy or USB stick or CD rom.

Dec 1st (Sun) Anti-Freeze Crank Up. Nunney Catch

Dec 27th (Fri) Mince Pie Crank Up At The Court Hotel

This Calendar of Events is composed by the editor based first upon a list supplied by our Chairman. I've added to it things I think will interest the membership, but it is not cast in stone! You should always make sure an event is still on by contacting the organiser in advance. The responsibility is yours!

Engines needed for -

Engines and any other exhibits Wanted For Staverton Village Day June 22nd .Details Ring, Dave Yates on 01225 752919.

Bristol & SGSEC Annual Rally is on July 7th. Frog Farm, Coalpit Heath. BS26 2QT. Application forms from Wendy Newton, 24, Rockside Gardens, Frampton Cotterell, Bristol. BS36 2HL

Chairman's Monthly Report

by Brian Baker (printed as received)

The meeting on Monday 29th April at the Court Hotel had guest speaker Pauline Alves 'from Lye Cross Farm, Redhill give a talk on cheese making. Lye Cross Farm is famous for its cheese, supplying most of the large supermarkets, also noted for its farm shop. The farm is a family run enterprise with Pauline's sons involved, one is a cheese maker the other running the farms. There is no shortage of milk to make the cheese as they currently run about sixteen hundred head of cows,

that's a hell of a lot of milk. Pauline went on to explain the process of cheese making from the milk to the finished product. The cheese is no longer made in individual truckles, but the curds are funnelled into a thirty foot tall container which *means the* cheese at the bottom-is subject to a weight of over one ton from the weight of the curds from the top. A knife at the bottom automatically cuts out a block of cheese weighing forty pounds, if one of these blocks are underweight the computer tells the knife to rise and the next block is the required weight. This was a brilliant talk by Pauline who spoke for about one and a half hours without referring to notes. After the talk and answering many questions that were fired at her, Pauline had boxes of cheeses for sale, a queue for this cheese soon formed and she was doing a roaring trade selling it. I bought several blocks and I can thoroughly recommend it as Henry and I had some for supper when we went home. Pauline had already told us that if she sold some cheese she would do the talk for free, when I asked her how the sales had gone, she replied brilliant, so we had a free talk. The usual raffle followed. I was pleased to see a good turnout for this talk, well done to all the members who turned up. The Crank-Up at Nunney Catch on Sunday 21st April was probably one of the best supported for a long time. There was a really good selection of engines, including some that we had not seen before, and quite a number of very nice large engines, I counted thirty three in total, most of which were a credit to their owners. We had one problem, normally at Nunney there is cones on site that we can rope the engine off with, but this time they were not available so ropes were not used, the next time we are at this site the committee will make sure we bring are own cones. As well as the engines there was a nice display of horticulture implements displayed by Alan Rogers. I think the oldest engine on show was a Gardener Model 0 3/4 hp. Made in 1902 and displayed by Andy Vincent. The other problem I encountered was some members complained about the raffle being drawn too early, members tend to load up and go home once the raffle is over this makes the crank up end too early.

Social News

By Earwig

Happy 90th Birthday this month to Bill Foster. Senior Club Members will remember Bill in the early days of the WSEC when he used to be the Stationary Engine Steward at The Stourpaine Bushes Rallies (now the Great Dorset of course) and he also gave very interesting talks on Club Nights, So Congratulations from all of us you are only ten years away from receiving a card from the Queen.

Brian Baker adds.....

The club would like to wish member Bill Foster a very happy 90th birthday on the 21st May. Bill joined the Wessex at the very beginning and has been a member ever since. He was an engine Steward at the Cricket St Thomas rallies and also at the Great Dorset Rally when it was at Stourpayne Bushes. Happy birthday Bill.

Lambourn Spring Country Show Sunday 5th May

By Robin Lambert

When I first spotted this Event advertised I thought I recalled exhibiting there around 25 years ago, but in reality it was more like 30 years which brought it home to me as to how time passes us by,

I never actually booked in a Exhibit but a phone call to the Organising Secretary was sufficient and a day before the event we were on site and in position, the event field was about 3 miles north of Hungerford not too far away from the M5 - in fact you could see Membury Services about a mile away.

It was nice to see a lot of Wessex members there in the engine line and some were even exhibiting Eggs, Chicken and Bantams in the Poultry Marquee, winning some awards, so well done to them.

Around 70 Engines of all makes were in two long lines, space was a bit on the tight side, but parking to the rear of your exhibit was convenient. One Petter "M" was playing up a bit and the fault was eventually found in the points of its BT-H Magneto where the thin spring steel strip that closes its points had broken and it was shorting out, but by and large I think most had a trouble free day.

Around 70 vintage Tractors did their trip around the show ring as did almost 100 Cars followed by 30 Motorcycles and 30 old Landrovers, plus Heavy Commercials and Army Vehicles, It was unusual to see a Dozen Mini Mokes all in a line, but I think they were entered by a Moke Club.

There was a super Auto Jumble here With four long lines of Stalls with plenty of gear for sale and I did spot a nice little Mill being carried back to a Bristol club member's Land Rover, no doubt we shall see this being Exhibited in the near future.

I was amazed at how many visitors came to this annual event. We were situated near the pay gate and for around three hours there was a very long queue of people patiently waiting to enter the show. I thought the charges were very reasonable at Adults, £5. Seniors, £3 and Programmes 50P.

It did cross my mind as to why was this only a one day show with so much to see? There was plenty for the children to look at, lots of animals, a small fairground, plenty of food vans - there were bands playing too. Then I thought that you need people to run these thing and they are getting hard to find.

The Ferrous Nag – or Johnson Iron Horse genny!

By Kim Siddorn

The day dawned bright & cheerful & although in February, it was not a bad day for May - such is the British weather! It was ages since I'd got my hands dirty, but I spent a

chunk of the day getting a Ferrous Nag going. I have a soft spot for these engines & have several now. These 12 volt, 300 Watt generators were made all over the Western World under license from the Johnson Corporation, but this one is a genuine 1944, USA built Johnson.

It didn't go & after stripping the carb, removing the flywheel & cleaning the points, all seemed fine - but still nothing doing. A thumb on the plug 'ole revealed no compression at all - what had felt like compression was actually the flywheel binding on the magnet pole piece which subsequently fixed itself.

I took the head off & the exhaust valve was well and truly stuck open, but a squidge of Plus Gas into the gaping port and tapping it back on its seat a few times soon fixed it. I was surprised to see there was no head gasket but the faces were very smooth & clean, so I just Hylomared the joint and nipped up the bolts evenly but not too hard.

A blessed electric start version, when reassembled it fired up easily & ran well. The mixture screw makes a big difference on these small bore direct lift carbs & getting it right means the difference between a start and not a splutter. Once correct, I find they are an easy starter.

These engines are still about in their thousands and the fact that they were bought up wholesale by the GPO just after the war and used and abused in almost every corner of the British Isles is why they are so well distributed on this side of the Pond.

Trailer talk

By Kim Siddorn

For some time now I've had the remnants of a trailer tent trailer kicking about the place. It is pretty well ideal for our purposes as it has a wide wheelbase, torsion rubber suspension, small wheels and brakes both load & handbrake. It is plated at 400kgs, so should readily absorb most engines one might cart about the place. To save the Imperialists like me from reaching for the calculator, that's (round figures) 880 lbs, 62 stone or just under eight hundredweight.

I finally got a round tuit and stripped off all the plywood, tailgate, fibreglass box sheeting etc, etc. The brakes are cable operated & can be trimmed to appropriate length before putting on a deck or engine

The frame was then laid bare & proved to be an oblong steel channel section welded to a pretty massive deep V section axle box. I angle ground off about a foot from either end of the frame to bring it down to a manageable length.

The end frames I then refitted across the open ends of the fore-and-aft channel sections. I drilled a pilot holes at the right angles where they met & opened these out to accept 10mm studding. This had nuts positioned inside the channels which were tightened both top & bottom using four nuts on one stud, if you follow me. It is certainly solid as it is, but welding could augment this.

The drawbar was now far too long & I took nearly two feet off it, cutting the welded brackets off and cleaning them up for repositioning. I simply repositioned the brackets & pop riveted them into place ready for welding. This has not yet been done!

New tyres were obtained and the frame painted a fetching shade of deep red. With my hip giving me increasing gyp, I've decided to sell it and as I had some space to fill hereby advertise it! Offers around £90, ready to tow away.

Kim Siddorn, 0117 964 6818.