# WESSEX STATIONARY ENGINE CLUB



# NEWSLETTER

MAY 1988

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# EASTLEIGH RALLY 1988

Sunday, 24th April was, for us in this part of the world, the date of the first rally of the new season. Organised by the Eastleigh Vintage Preservation Society, it was their 15th Annual Rally, held this year in the grounds of Fairthorne Manor, near the village of Botley, Hants. The morning dawned a white frost, but quickly warmed up once the sun broke through, resulting in a virtually cloudless day, making it a most enjoyable start to a new season, what more could an engine nut wish for?

The show itself had something for the whole family; there were a few market stalls, a small autojumble, even one chap selling magneto spares. He also had a few new mags and the prices which caught my eye were £54 for a Lucas SR1 type and £110 for a four cylindered one of which the make escapes me for the moment. A number of local Clubs and Charities were scattered around the field.

The line-up of cars was very varied with a couple of Ford 'T' models coming to mind as being superbly restored, examples of Rolls Royce, Austin, Morris, Rover, Vauxhall, and others, plus a contingent from the Moris Minor Club. Motor Cycles were represented by such names as BSA, Cotton, AJS, Norton, Triumph, Royal Enfield amd Vincent. Their ages ran from early 1900's through to the late 1960's. A small contingent of Commercial and Military vehicles was also present, plus a 1969 Bedford fire engine which was allowing kids to play at being firemen for the princely sum of 10 pence! This went to charity. Tractors were down in numbers this year; Field Marshalls, International Harvester, Fordson and John Deere, This tractor had been belted up to a threashing drum and gave short displays during the afternoon. The other exhibit in this section was a Lister Autotruck with a Lister Diesel engine. Registered for road use, the owner merrily drove it off home at the end of the day. (Hope he wasn't on RED diesel...Ed.). Static displays scattered around the site included a selection of oil cans; I never knew there were so many different designs and shapes. (I understand that the Motor Museum are trying to do a survey as to how many makes and types there were...Ed.). Another collection which comes to mind was of accordians or 'squeeze boxes'.

Leaving the vintage machinery for a moment, several custom cars were attracting many comments about their wide wheels, dark windows, brilliant chrome trim and immaculate paintwork. A local modellers Club were racing model radio controlled cars, all very serious stuff. They even had a computer to work out the final placings. Don't those little cars go fast? The drivers ranged in age from early teens to fifties mark, so like our own hobby of old engines, all ages are catered for. On the front lawn of the big house were displays of majorettes, gymnastics, and a couple of bands entertaining the public when they wanted a rest from walking around. The 'inner man' was also well provided for; tea and sandwiches were supplied in the big house, they even had a side of beef barbeque which was on the go all afternoon. A beer tent was on hand for those wishing for something a little stronger. Standing nearby was the only steam entry, a Babcock & Wilcox 10 ton road roller which was very nicely restored. A small auction was held on site; however, there was very little to sell as no one seemed to know about it until the same morning. There was a few mowers, a JAP engine, Tiny Tim generator engine, plus a few other items, very few of which reached their reserve as no one was prepared to buy. Also the auctioneer was so slow that if the lots had been greater, he would have taken all day!

Now to the Stationary Engines. A wide range of manufacturers were represented. 82 Engines were exhibited in this section which included a few mowers and cultivators. Many of the engines were driving some item of machinery such as a water-pump, flour mill, roller mill, vacuum pump or dynamo. One chap was showing a complete milking dairy complex complete with churns and a cooler all powered by his Ruston Hornsby 3PB. To give it a more authentic appearance he even had white coloured liquid going through the cooler. This set-up was most impressive and few spectators failed to

stop and watch for a while. As one can imagine, Lister engines predominated with model D, and A. To those add a couple of L-types, a J-type and a single CS diesel with extra heavy flywheels and radiator cooling. Petter came in the form of M and A types including a nice apple top 3 hp. Other makes were Wolseley, JAP, Bamford (both horizontal and vertical models) severla different models of Stuart Turner, a Hartop S-type open crank, whilst Ruston Hornsby came in PB, PT, PR and AP. The smallest engines were two Heinrici hot air engines, one of which was driving a small grindstone. A third hot air engines was a home made model, built by it owner, Richard Tracy, as part of a school project. (Who promised to send me on photo copies of the drawings...! hint, hint...Ed). At the other end of the scale, the largest engine was a Loughborough College engine, rated at 9/10 hp and built in the 1930's. It had been originally used as a test engine only but now looked splendid, restored and mounted on a four-wheeled road trailer.

Leaving the best to last (my words...Ed), American built engines were well represented with a couple of Fairbanks, Morse Z-types of  $1\frac{1}{2}$  hp, one throttle-governed, was belted up to a Fairbanks, Morse water pump. The other was a Competition Model with dish-pan flywheels, battery and coil ignition and was hitting and missing quite happily all day. A small Detroit running on a Lister D carb whilst the owner awaits a new casting to arrive from the USA, an International M-type, Delco light and my own Aermotor with water pump but it seemed strange for such a line-up not to include an Amanco.

During my many walks around the site, I can recall only one engine, a Delco, that did not run at some time or another. If my memory serves me correctly, this engine was a non-runner last year, being dumped early in the morning and just collected again later in the day; I'm sure this sort of thing just gives the Stationary Engine Movement a bad name.

The day ended just after 5.00 p.m. when the exhibits were loaded up ready for the return journey.

Patrick Knight

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ABBEY HILL RALLY - 30 April, 1/2 May

Having been somewhat laxed with my correspondence to our editor for some time now, Its about time I put matters straight and donated him a few lines to help fill our monthly Newsletter.

I only managed to attend this rally on the Sunday and Monday but I am told that Saturday was quiet regarding members of the public. Weather reports weren't too promising for the next two days but as it turned out we had a lot of sunshine plus high winds and the odd shower. The Yeovil Showground can stand a lot of rain as it drains straight away into the sand underneath the grass.

Having just arrived on Sunday morning I was greeted by one of the Wessex Black & White Minstrels, Brian Verrall, who along with Messrs. Munt, Harris and Cleal had stood close to an old tractor which would not start up until it had deposited clouds of foul back oil and fuel over half the rally field.

Its always nice to meet what I term as some of our further flung members, who are too far away to attend Club Meetings; there weremany at this show, one in fact right next to me was Dave Webber from Wiveliscombe, who with his son, James, brought along a 3 hp Ruston Hornsby PB. This was driving a large wooden line shaft which in turn powered sheepshearing clippers and James brought his  $1\frac{1}{2}$  hp Petter M and drove a water pump. All this equipment was brought to the show inside his caravan!!! how does he do it. A long way across the field, Brian Munt was playing with his organ (I hope that sounds right!) and Dave Large was spotted photographing an unusual engine in the back of a club member's van, perhaps its his next project? Bill Appleby brought Paul Martin's Wolseley (good spelling eh Ed?) back to life after some skillful surgery on its magneto plus a new head gasket and a few adjustments here and there.

Derek Watts was doing a good trade selling the new Club cloth sew-on badge at only £1 each, Jackie did a good trade on subscription renewals. Funny how they wait to see her on the field to pay up or perhaps they are missing their Newsletter, anyway we have 269 paid up now so that can't be bad. Wally Hull had his usual trailer load of bits and pieces for sale as did quite a lot of other exhibitors, including me.

Quite a nice selection of stalls to browse over, something for all the family, I counted around 20 steam engines in attendance and with lots of tractors, lorries, coaches, motor bikes and everything else we all enjoy, made this a very nice two days for me. Full credit to Terry Heath for looking after our section, which was all nicely contained behind two stout ropes and everyone was able to park close to their engine.

Robin Lambert

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## OBITUARY

Our condolences go out to Ron Frampton who's wife, Joan, passed away last month. Most weekends throughout the rally season, they both travelled from their home in Bournemouth to rallies all over the South of England, exhibiting their box trailer full of working model engines. Although not a Wessex member, they have many friends within our Club who, I know will be saddened to hear of Joan's death.

The dove-tail method as described in previous Newsletters results in a strong permanent repair providing it is not required to transmit too much power or is misused. There are, however, some other methods that can be used to repair gear teeth, now outlined below.

- 1. If the gear is a small steel one, and not transmitting too much torque, then a new tooth can be brazed or silver-soldered on and filed to shape. This is not to be recommended for cast-iron gears as the surface area for the braze to hold in insufficient.
- 2. A row of steel pegs threaded at one end can be screwed into holes tapped closely together along the tooth line. Use Loctite to permanently secure the pegs, then file them to the tooth shape.
- 3. For gears with rims too thin to allow a dove-tail slot to be cut, the new tooth can be secured with pegs or held in by screws from the inside of the rim. It is worth cutting a small parallel slot no matter how shallow to provide a positive location for the tooth.
- 4. Gear teeth can be repaired by building up with weld then profiling to shape. Cast-iron welding is difficult at the best of times and must be almost impossible for this application. Steel teeth should be reasonably easy to build up, particularly if some of the original tooth remains. (When using welding methods, both cast-iron and steel, it is possible for hard spots to form thus making profiling difficult as well as causing further damage during running. Certain types of rod minimise this so check with your supplier...Ed.).

The methods described in this series of articles can all be speeded up by the use of a lathe or mill. The general methods are the same but for instance, the dove-tail slot can be accurately machines. This in turn will result in the ability to accurately machine the blank to fit the slot. The final adjustment is still best achieved by hand, machining the blank slightly oversize and then filing to fit. If dividing head equipment is to hand, then marking out of the tooth profile can be done more accurately. Lastle, of course, the teeth can be re-machined if the correct cutters are available.

Ever since gears were first used in machinery, some of these methods were used to repair them. The gears often found in water and wind mills have teeth of apple wood wedged individually into a wood or iron wheel. They were regularly replaced during the life of the mill. Nowadays, commercial gear repair is very expensive and is often not a viable proposition. By learning this lost art, you will help keep alive another aspect of by-gone engineering related craft. Good luck with your teething...

# Jeremy Adams

We are very grateful indeed to Jeremy Adams for this interesting and detailed article. Not least, from my point of view, because for the last few months, it has been the only article on my file. It seems that the more members we get, the fewer are prepared to help the Club and the Newsletter, by writing something. Next month, a blank sheet of paper with a WSEC heading may fall through your letterbox with the morning post...Don't blame me, blame yourself...Ed.

#### THIS 'N THAT

Another 'first' for the WSEC? One of our Club members had made the Sunday Express colour supplement. In the issue of April 24th, featuring an article on those mechanical dinosaurs, namely the Land Rover, Ross Floyd described how he restored his Series 2 and his association with the Series 2 Club.

One of our ex-committee members had been working for some three years on a quite large Stuart Turner beam engine model. I was recently privilized to inspect the finished article; no prize for guessing who the mystery modeller is, but I am told, all will be revealed at the 'Members Models' evening on October 31st.

#### FOR SALE

Petter A1, fully restored and runs nicely. Another half of an engine for spares; Lister D-type, fully restored and runs well; Centrifugal water pump; set of cast iron wheels and various belts. Phone Mr.Gill on Yeovil 74908 who will sell separately or consider a price for the lot.

Mitchell marine engine, Lister 6-1 with 3 Kva 240 volt generator; Ruston Hornsby and saw bench; Sets of shearlegs 15-29 ft. high. Prices open to negotiations. Contact Mr.Graham Clark, Littleton Cottage, Winford, Near Bristol. Tel. Chew Magna 332284.

Bamford 4 hp, £330 ono. Pete Holloway, Meadowside, Chilton Domer, Yeovil. Tel.Ilchester 84037

FOR SALE (continued)

Horizontal fuel tank with central filler neck. 36" x 12" dia. Hardly used and would make good auxillary tank for Transit or similar - £10; Richmond & Chandler Mill, partially dismantled but complete and would make good rally exhibit. Previously advertised at £35 - now £30 to clear. Eric Brain, 5 Greenridge, Clutton. Nr. Bristol. Tel. (0761) 52633.

Lister D-type, Godwin water pump and Ruston Hornsby vertical twin diesel all mounted on a good trailer for display purposes - £200 ono. John Law, Tel Bath 852498 after 7.00 p.m.

Lister Junior A28, 3\frac{3}{4} hp - £35; Wolseley WD11. no mag. - £15; Petter 1\frac{1}{2} hp M-type, flat top(?) -£35; Petter Universal, 2 hp, horizonal air-cooled, needs handle and petrol tank, otherwise very sound -£45; Coventry Victor M.A., flat twin, ex.WD, complete and very sound with a rough spare - £40; Villiers WX11, 1\frac{1}{2} hp, water-cooled, early 1930's - £40. Will exchange for anything made by Ruston Hornsby. Roy Pointing, 6 Elm Way, Combe Rise, Shepton Mallet, Som. Tel. Shepton Mallet 4222.

# WANTED

Coventry climax water pump, approx. 2" water outlet, preferably in good working order but would consider one with restoration work required. Any information as to the whereabouts of such a pump would be welcomed. Simon Witts, Bitton Railway Preservation Group. Tel Bath 331778.

# FOR SALE - Club Paraphenalia:-

Club Sweatshirt with Club motif	£6.50 each (small, large, OS, XL)
Metal Club lapel badges	£1.00
Cloth sew-on badges	£1.00
Car stickers	60

Following the success of last year's almost impromptu event, the Tencrest Mendip Crank-Up, we are pleased to announce this year's event with rather more notice. The date is August 10th and the Crank-Up will be at the same venue, the Tencrest Garage, next to the Mendip Inn on the A37 near Gurney Slade, three miles north of Shepton Mallet. The site is limited to about 40 engines, 6 tractors. 6 cars and a few motor cycles. There will be a Car Boot Sale at £3 per car. We are informed that the event will be informal as last year and any profits will be divided between the WSEC and CLIC. There will be no plaques but any raffle prizes will be welcome. Please contact Bill Coombs on Oakhill 840868 (evenings).

#### CLUB EVENTS

June 18/19 Club Rally at Cheddar Football Ground on the main A371 Wells to Cheddar Road. Details from Hon.Sec. Mrs. Shirley Gale, 18 Church Lane, North Bradley, Trowbridge, Wilts.

June 27 Evening Crank-Up at the Old Down Inn, Emborough. Bring an engine and enjoy a mini-rally, a drink perhaps or a snack at the bar.

July 25 'Guess the Object' an annual vintage antique artefact quiz.

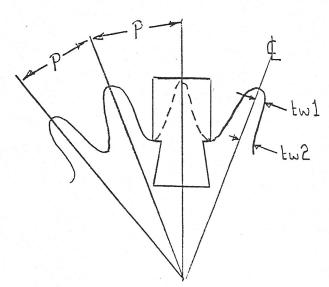


Fig 7 Transfer dimensions from existing teeth onto blank ofter fixing into position and trimming top and sides to shape.



Fig 8 New tooth profiled to shape

GEAR TOOTH REP AIRS Sheet 3.

