



*Lots of activity at 'Rebuild'*



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# THE EDITOR

A Happy New Year to you all! Every year I make a firm resolution that this will be the year when I start to rebuild my J2 (it's been off the road since 1966) and every year I fail miserably. Well, this year is going to be different! Why? Well, a comment from my brother that "you're going to run out of time mate!" concentrated the mind, so it's 'action stations' from now on. This might well mean that I shall not be using the TC much this year, but I am still going to strip the front end down and record everything that I do. I also have a PB with a half rebuilt engine, which I want to get back on the road by April, so it's going to be a busy year!

I was out in the TC today, testing my new brake drums and was really pleased to be 'flashed' by a very nice white MGB – makes such a difference after being totally ignored by scores of MGFs – I doubt if most of them even realised that I was driving an MG! This reminds me to acquaint you with a 'snippet' from 'Accountancy Age' magazine about the probe into the collapse of MG Rover. The cost of the Department of Trade and Industry's investigation into the company's demise has already hit £2.1m. This is £1m more than first estimated and an 'end date' for the probe has yet to be fixed. Never mind, the good old British taxpayer will 'stump up'!

What do you think about the new "Safety Fast!"/"MG Enthusiast" arrangements? Do you think another option could and should have been examined instead of the apparent haste to "get into bed" with a commercial partner? Well, let me nail my colours to the mast and say that I do! I regret what I term the 'dismemberment' of "Safety Fast!" and suggest that the magazine could have been improved by commissioning some articles by professional motoring journalists. I happen to think that this would have cost less than the present arrangements, the bill for which, may not be to your liking. What is certainly not to my liking is the editing of my carefully prepared T-Type Newsletter in the January SF! ..... *(continued on page 4)*

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I have, up to now, been used to submitting the Register SF! contributions to Andy Knott in Kimber House in virtually the final published format. This means that when I receive the magazine, the style and layout is as I intended. Unfortunately, this is no longer the case since Octane Media now have a hand in it. Apart from errors in the text (which were not made by me) I had included a wonderful photograph of Peter Jones' TC towing his period looking trailer, laden to the gunwales with rubbish on its way to the tip (Civic Amenity Site). This was intended to complement the photograph of Martin Weaver driving Peter's car in the Chew Valley Gymkhana. The result was that the caption lost a lot of its meaning.

Dave Heath has asked me to let you know that the Annual TA 'natter' is on 28<sup>th</sup> May (a lot earlier in the year than usual). The venue is Radley College (near Abingdon) and coincides with the start point of the Abingdon Works Centre's Old Speckled Hen Run. The intention is to hold the 'natter' whilst the Run is in progress and to have a cream tea on the Run's completion. There will be more details in the March TTT.

We now move on to subscriptions for the TTT editions for the remainder of 2006 which are due, as soon as possible, please, immediately after the receipt of this edition. The Committee recently considered a report prepared by the Editor which informed them that Income from subscriptions and advertising was expected to exceed Expenditure on print and distribution by £300 when the final accounts are drawn up after the despatch of this issue. The proposal to keep the subscriptions the same at £6 (UK) £11 (EU) and £15 ( Rest Of World) was agreed. However, due to uncertainties about future printing and mailing costs and to bring the TTT accounting year end in line with the Register's accounting year end (31<sup>st</sup> December) it was agreed that the 2006 subscription level would buy 5 copies (March, May, July, September and November) so there is, in fact, a real increase, which I hope you will accept is necessary to stay in the black. For 2007 we will need to set a subscription level to cover the six issues in that year.

Assuming you are happy with the above, please send your cheque (made payable to 'MGCC T Register') to me at **85 Bath Road, Keynsham, BRISTOL BS31 1SR**. If you are not an MGCC member, the subscription is £12, not £6.

Finally, a couple more news items..... I am going to try to get the March issue of TTT out in time to be distributed to the attendees at 'Rebuild'. This will be a tall order, but I'll do my best. This issue will contain an article from the Webmaster about some improvements he will be making to the website over the next couple of months. There will also be articles from Roger Furneaux on fitting taper roller bearings to the front hubs and one from Eric Hayes in Australia on refurbishing a TC gearbox remote. Good stuff!

# T REGISTER NEWS (Compiled by John James)

*This month we start with something different as Roy Miller, Register Historian and DVLA Representative, has provided an interesting article after a careful “dusting down” of the files, following his house move from Buckinghamshire to Gloucestershire. I have to confess that after reading this article I have been shamed into providing the history of TC0750 ('The Vicar's Car') and I trust that those of you who have not already done so, will contact Roy with the history of your car.*

## **WHERE ARE THEY NOW?**

This article is designed to tell you something about my role as Historian to the T Register and to share with you a little of the interesting material we hold on file in hard copy.

To do this I thought it might be fun, and perhaps revealing, if I highlighted some of the cars that have seemingly disappeared - that is, they were on the T Register record many years ago but nothing has been heard of the car or of any ownership change in recent times. Of course, this does not necessarily mean the car has disappeared forever, it may well be quietly sitting in somebody's garage or shed waiting to be rebuilt or restored. Most T-Types have taken this route at sometime or another – some make it through to roadworthiness again, sadly some do not and get sold on in a dismantled state or eventually broken for spares. Here are just four examples from the missing, whereabouts unknown file: -

**TA 0357, registration mark. EKN 377, T Register no. 1006.** This car was first entered on the Register records in 1963/64 (shortly after the Register was established). The owner then was a Mr H G Cox of Grays, Essex. He wrote to inform us that the car was in a rough condition when purchased in June 1962 and required an extensive rebuild to the body, chassis and engine (MPJG 603). By 1967 he had done 4000 miles on the rebuilt engine, replaced the defective wood framing and extensively re-skinned the body in aluminium. At this point it appears that a TF **OXY 144 (Register No.1260)**, was purchased and the TA was put up for sale for £150.

**TA 1131 registration mark BTF 77, MPJG 1408. T Register no. 198.** In 1965 its then owner, Mr G E Oliver of Purley, Surrey decided to sell the extensively restored car for £135. By this time it had been re-sprayed, re-trimmed, had its instruments and carburettors rebuilt, had a major engine overhaul, new tyres etc. Interestingly, news of this car from an earlier period comes from an entirely different source – an article by Vic Wells-Kendrew writing in MGCC Auckland, New Zealand journal in October 1996. **BTF 77** had been his car in March 1956 when he had completed his two years UK National Service. Purchased for £120 he describes how he had driven the TA to the South of France and into Italy, before returning to the UK via Paris. The MG

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bug had apparently bitten deep because by 1996 Vic was the proud owner of a TC registered **MG TC 48** in New Zealand. In its very early life TA 1131 had been a Lancashire Police Force car as had been TA 1130 and TA 1139 – also known to the Register.

**TC 1276 registration mark GUR 781. XPAG 1845 – T Register no. 238.** An early entry to the Register, the owner in 1964 Mr. A Mackenzie of Alfriston, Sussex stated that he knew little of the TC's early history. He had purchased the car in June 1963 since when "time, money and effort had been lavished on her". First resprayed in 1957, the paintwork was described as being in a sorry state. The engine, which had been replaced in 1956, was bored out to plus 60 'thou. by 1964. Telescopic dampers on the front, various dashboard mods and 16" wheels completed the picture! Mr. Mackenzie had sent photos of the car to Roy Thompson who was setting up a T Register album in 1964. This early album has unfortunately been lost, so if anyone knows where it went to, do let me know. It would make an excellent addition to our extensive modern collection of T Type photos. Contributions of old and new photographs are always welcome.

**TC 1362 registration mark HXD 99. XPAG 2024. T Register no. 9817** The reason why this car has a late T Register no. is because not much was known about it until 1996 when the late Nigel Mossop started digging into its history with the help of a good friend who had a connection at the time with the Duke of Edinburgh. Prince Philip was known to have owned a black or dark green TC in 1946 when he was courting the then future Queen. Indeed, we have on file copies of newspaper reports of letters auctioned in 1996, from Princess Elizabeth that refer to the times when the Prince drove her about in his M.G. which she described as "great fun..... only it is like sitting in the road – the wheels are almost higher than one's head".

Nigel's research in 1996 revealed for the first time the chassis number and registration mark. It was also established that the TC had been purchased new on 25<sup>th</sup> September 1946 and sent for sale to Car Mart Limited in November 1948, whereupon it seems to have disappeared. No photos are known to exist, however the famous MG artist Harold Connolly depicted Prince Philip getting some 'pool' petrol for his new TC. This drawing can be seen on Page 19 of the T Series Handbook Workshop Edition published by the New England MG T Register Ltd.

So these are just four cars that have become "lost" to the Register over the last 40 years or so. There are of course many more. If you can throw any light on whether they still exist or what has happened to them, my Register colleagues and I would be delighted to learn of anything new in order to complete the record.

Of course, I can only tell you about what the Register has on file concerning these cars because the owners, and Nigel Mossop in the case of TC1362, took the time and trouble to tell the Register. If you would like to tell us about your car and did not complete one of our Car History File forms in 2002/03 (over 500

returned thank you), please bring us up to date by writing to me at Badgers Bank, Pound Lane, Little Rissington, Gloucestershire. GL54 2NB or email to [roymill@waitrose.com](mailto:roymill@waitrose.com). We welcome your contribution.

**Roy Miller**

## REGISTER EVENTS FOR 2006

1. **'Rebuild' 2006** By way of explanation for those of you who have not attended a 'Rebuild' event (and for the benefit of our worldwide readership), the Register held its first 'Rebuild' event back in 1980. It was thought at the time to be a good idea to gather together some experts in the field of T-Type maintenance/restoration, who would give talks about their specialist subject and thereby impart some of their knowledge. Well, it certainly was a good idea because the event has now run for 25 years and the 'punters' keep coming back for more! Just about every subject under the sun has been covered with regard to T-Types and most subjects have been covered more than once, but there is always something new to learn.

This year's organiser is Peter Cole (Peter also did the job last year) and I'll hand over to him shortly. Before I do so, I would like to pay tribute to Peter and past organisers. With over 100 attendees and up to six technical sessions, of which up to three run concurrently, the job of organiser is not one for the faint hearted. I never fail to be impressed at the smooth running of the event and if we do get the inevitable occasional 'hitch' (like 40 trying to get into a classroom which only holds 20!) it is quickly overcome by the good natured attendees. After all, we are all kindred T-Type spirits! Now over to Peter.....

"It's that time of year again. Rebuild 2006 will be held on March 12 at St Ernulf's School, near St Neots, starting at 10am sharp. As usual, there will be a welcoming bacon sandwich and a mug of tea or coffee served from 9.15am. If you have a T-Type or you own any other interesting MG please try to travel to the venue in it.





The price this year is held at £25.00 per person, and includes all refreshments, including a hot lunch. (Please indicate in a brief note which accompanies your cheque if you have any special dietary requirements.)

Please apply to:

**Peter Cole, 19 Parkway, BOGNOR REGIS, PO21 2XR.**

Please make cheques payable to Peter Cole, and mark your envelope 'Rebuild'. Tickets will be sent out from March 1, and cheques will not be cashed until your ticket has been posted. This year, numbers will be limited to one hundred, on a 'first come first served' basis, so an early application is recommended.

The provisional programme is as follows:

T Type Brakes  
Body Alignment and Weather Equipment  
SU Pump Identification and Refurbishment\*  
Question & Answer Session on Instruments\*  
TA Electrics  
Upholstery

\*may be combined into a single session

As stated above, the programme is provisional at this stage, but we hope to be able to publish a definitive programme in the March *Safety Fast!*, and of course, on our web site [www.tregister.org](http://www.tregister.org) as soon as it is finalised.

Please indicate in a brief note which accompanies your cheque as to which presentations you would like to attend by rating the subjects from 1 to 6, with 6 being the session you would most like to attend. This will not prevent you from changing your mind later, it's just to give us an indication of which topics will be most popular so that we can allocate the largest classroom to the most popular topics.

Throughout the day we will be holding our usual 'Bring and Buy Sale' of new and used parts. So if you have any parts to dispose of please bring them along labelled with your name and the price. The sale is commission free, and is provided as a service to all 'Rebuilders'.

'Rebuild' will end at 4.30pm and be followed by the T Register AGM. If you are a member of the MG Car Club you are urged to attend. Remember, it was a resolution passed at last year's AGM that made a significant contribution to halting the ridiculous Kimber House scheme." **Peter Cole**

**Editor's Note:** Please remember to make cheques payable to Peter and not the Register - we don't want to be liable for VAT on the ticket price. The other point to highlight is that tickets will not be sent out until early March, so don't panic – you will not hear from Peter between now and early March.



## 2. Shuttleworth 2006 – ‘T’ Party

Once again, for the benefit of those who have not attended this event and for our worldwide readership, the ‘T’ Register has, for a number of years held its ‘T’ Party on the occasion of the Summer Air Display at Old Warden, Bedfordshire, home of The Shuttleworth Collection [www.shuttleworth.org](http://www.shuttleworth.org)



Shuttleworth has a unique flying collection, showcasing the first 100 years of flight and the Summer Air Display, which takes place on 2<sup>nd</sup> July is an event not to be missed. This year, the price of an admission ticket (£16 per person) includes entry to the Swiss Garden which is adjacent to and accessible directly from the Airfield. A visit to The Swiss Garden takes you back to the early 19<sup>th</sup> Century, when an interest in ornamental gardening and picturesque architecture first came together.

Graham Brown is again organising this event and his initial thoughts are to offer participants the **option** of a mini weekend starting on Saturday 1<sup>st</sup> July. Present thoughts for the Saturday are for an itinerary from Bedford (as last year) to Wimpole Hall (National Trust) in Cambridgeshire for lunch and back via RSPB\* Sandy for tea before an evening meal, probably at The Anchor at Great Barford, on the banks of the River Ouse.

\*RSPB is The Royal Society for the Protection of Birds.

Please make a note of the date in your diaries and I'll get Graham to give me a "write up" for the March issue of TTT, by which time the arrangements will have been firmed up. We normally have around 60 cars for this event.

## 3. Silverstone International Weekend

This event needs no introduction! The date of this year's meeting has been given as 23/24/25 June, so this event should really have been placed before the ‘T’ Party if we are going in chronological order. My excuse is that I am still not sure if this is a firm date – well that's my excuse and I'm sticking to it!

#### **4. The Autumn Tour**

This year's Tour is based on The Cedar Court Hotel, Harrogate, North Yorkshire and Organiser, Grant Humphreys, already has the full quota of 60 cars entered for this popular event. The Tour takes place on 01/02/03 September and if you wish to register as a 'reserve' in case anybody drops out, please contact Grant on 01706 642688 or e-mail [grant.chumphreys@btinternet.com](mailto:grant.chumphreys@btinternet.com) Grant will be sending booking forms to the 60 car entrants and they should arrive about the same time as this magazine, perhaps a bit before. He reports current progress as follows:

"We are currently engaged in devising 'skeleton' routes, one covering the Western side of the Yorkshire Dales on the Saturday, and another route covering the North and Eastern Dales on the Sunday. When these have been agreed (hopefully by early March 2006) we will then go into more detailed route planning."

#### **5. Practical Skills Workshop**

The Practical Skills Workshop is a relatively new event in the 'T' Register calendar. We ran the first couple of Workshops at North Bristol Technical College, but the second one turned out to be a lot more expensive than the first and we felt we could no longer meet this level of expenditure.

Our Events Co-ordinator, Graham Brown then hit on the idea of asking T-Type Specialist, Peter Edney (*his advert is on the inside front cover*) if he would be prepared to make his modern workshops available. Peter readily agreed and the November 2005 issue of TTT carried a report on the Workshop which was held there in October 2005.



We have now agreed on a date for the 2006 Workshop. This will be held on 17<sup>th</sup> September at Peter Edney's premises. Fuller details will emerge over the coming months, but we would welcome ideas for topics you would like to see covered. In this respect, we are minded to reduce the number of topics in order to cover them in more depth.

#### **Committee meeting – 15<sup>th</sup> January**

The Committee meets at Oxford on the above date. We do, of course, have the MGCC Council meeting in March so will need to decide on the names of two representatives for this meeting along with any Motions to be tabled.

# Notes from a Rebuild

## No. 8

## The Chassis

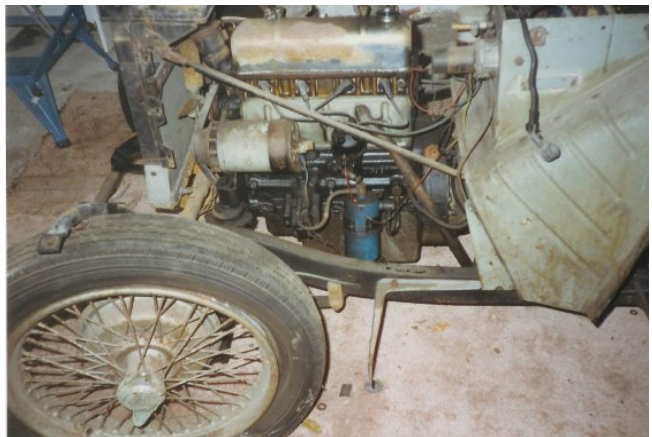
### Inspiration

I can remember clearly the moment that I decided to stop dreaming and get on with my full restoration of TC0301. Don Spurr was giving a talk entitled "Back to Basics" at the 1995 T-Register Rebuild Seminar in St. Neots. To illustrate his talk he'd brought his chassis along with him and, as anyone who knows Don's immaculate restoration work would agree, it was simply stunning. I still have my notes from the talk with me and have unashamedly included several of Don's recommendations in this piece.

### Taking it apart

It's relatively easy to pull the TC apart; take the hood and frame off, windscreen and head lamps off, bonnet off, spare wheel carrier and tank off. For the moment keep all the sub-assemblies together, as far as is possible. The bulkhead bolts should not be a problem, but the six fixing bolts that connect to the outriggers and through the side-screen box may need a nut splitter or cold chisel. After you have the tub off and stored in a safe place, stop! Don Spurr's first tip worked out brilliantly: "have the complete chassis steam-cleaned before you go any further". I got a local professional to clean the entire chassis and clean out the petrol tank very cheaply; it certainly saved gallons of Swarfega and garage cleaning. It's great when you can clearly see what you're working on. *(Photo below is of front of TC0301 before steam cleaning).*

All the restoration books emphasise the importance of a slow and methodical approach to disassembly; take photos, make notes, put components away in numbered bags, etc. I did all these things and have a wonderful sketchbook full of



drawings. The sad fact was that when it came to put it all back together, it was five years later and the sketches never showed what I needed. So

make sure you have some good friends who let you peer at, and take measurements of, their completed cars!

## **The Chassis frame**

If you have managed the near impossible task of removing the front hanger bolts of the rear springs, you should now have a naked frame. On Don's advice I had this shot (not grit) blasted and painted in holding primer. Back in the garage and with the chassis on stands, I measured it for alignment (see the "brown book", alias TC "Instruction Manual", page nine). I also did an inventory of all the problems I'd been warned about in "TCs Forever!" (page 98) and "The Immortal T-Series", Chapter VI – Strengths & Weaknesses.

It seems my TC had had a relatively stress free life; the chassis alignment was within the  $\frac{1}{4}$ " tolerance specified and there were no cracks in the side-rails. On the other hand my list of repairs amounted to:

**Welding** in the dozen or so random holes previous owners had drilled into the chassis rails for cycle-wings, luggage racks, etc.

**Remanufacture** of one of the rear shock-absorber brackets which had sheared across the middle, and weld up the other.

**Weld** up the cracks in the rear outriggers

**Add** the fillets suggested by Sherrell on page 98

**Add** additional fillets at the very front of the chassis boxing to prevent the side rails splitting at the top of the arc above the front axle.

**Rivet** one of the dumb iron castings to the side rail.

**Replace** the missing 'D' shaped fillets on the side-rail ends

**Untwist** a side-rail under the spare wheel.

At this point I had to make a choice, should I jettison the idea of using 5/16" round head rivets where they were missing or damaged and replace them with high tensile nuts and bolts? Staying true to my original maxim of "doing it like Abingdon ", I of course went the rivet route. Rivets were supplied by Rivet Supply Co. (now part of Sapphire Products Ltd., see *next page for contact details*), some of the most user-friendly people you can meet. I used a professional to remake the rear shock-absorber brackets; however, if you want to do it yourself, I strongly recommend you get a copy of Octagon Car Club 'Bulletin', No. 266 – April 1992, where there is an excellent article by our 'Rebuild' Organiser, Peter Cole, who goes into considerable detail about the fabrication of brackets from 5mm steel.

## **Professional Help**

If you want to leave chassis frame work to a professional or you are looking for key components (side-rails, cross members, shock-absorber brackets,

even dumb-iron castings) to use yourself, you can contact Russ Trueman at Yorkshire Chassis Services (*see contact details below*).

## Chassis Finish

Another big decision and one that almost defines your rebuild effort is the choice of finishing. Like you, I have read endless “the only way to do it” articles, letters and e-mails. Don Spurr told me and the other “Rebuilders” (*at the 1995 Rebuild Seminar*) that he thought there were three basic alternatives:-

zinc coating

paint

stove enamel / powder coating

On balance he thought that epoxy powder coating was the best. I know nothing about the technicalities of metal coatings, so I started by chatting to the owner of a mind-boggling, red concours winner at Silverstone. You could have shaved using his chassis side-rails as a mirror. I asked how he achieved this level of finish and he said (I think), “acres of filler and 24 coats of 2-pack”. It looked stunning then, but I wondered about 10 years down the road.

I subsequently visited a powder coating company in Southampton that specialised in marine work. I voiced the often mentioned reservations about “rusting beneath the powder coat”, “lack of resistance to impact”, “chipping”, etc. His robust response was that this was all a load of b\*\*\*\*\*s. Their coatings were designed to protect structures that would be under Southampton waters for 20 years, “I don’t think your TC is going to get that sort of punishment, do you?” He then got a hammer and walked into the yard where he attacked a newly coated pipework frame with gusto; no chips to be seen; I was sold. I also liked the more subtle silky finish, as opposed to high gloss mirror finish of “concours” cars. I was, and still am, very pleased with my choice of powder coating for the chassis components.

Happy fettling!

John Steedman

[johnhwsteedman@aol.com](mailto:johnhwsteedman@aol.com)

Russell Trueman

Yorkshire Chassis Services, 01132 571134

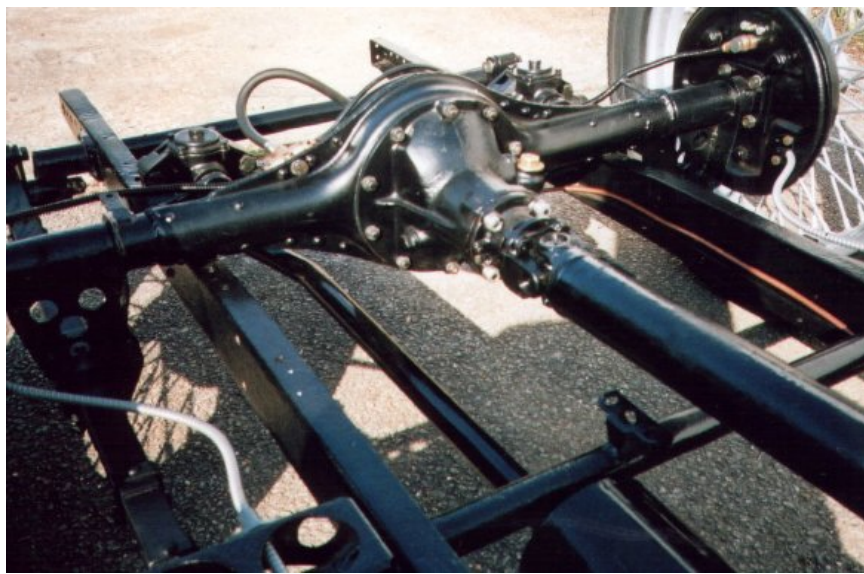
Unit 6, Holly Park Mill, Wood Hall Road, Calverly, Leeds

Rivet Supply Co. (Sapphire Products Ltd.), 0121 326 6000

Unit 4-6, Dunton Industrial Estate, Mount Street, Nechells, Birmingham B7 5QL



## TC0301 Chassis Finish as Described in 'Notes From a Rebuild No. 8



## **A TC Reborn**

***John Steedman (previous article) finished his restoration a couple of years ago. David Lewis (this article) is just starting his.....***

TC 1037 rolled off the production line on 2 July 1946, one day before my first birthday. It became KPG 206. Its early history is unknown to me but by 1960 it was in the ownership of a Bristol resident who sold it to a chap in Gloucestershire who sold it to me in January 1965 for £160. I drove it regularly for three years whereupon I moved to London shortly before getting married. The car stayed at my parents' house outside Bristol.

Already by that time the car was in a pretty ropey condition. As I was not using it I stripped it down during return visits to my parents and started to rebuild it. I got hold of some wood of indeterminate genus and made some new main rails (at evening classes at a Fulham secondary school) and started putting it back together. I remember getting the chassis straightened (incompletely!) in return for a morning's labour spreading a load of ready mix concrete over a workshop floor. I got the chassis there in the back of a friend's Simca estate car. It stuck out about 6 feet!

Once the wheels were on and the bodywork more or less present my friend with the Simca towed me back to London. We managed to remain inconspicuous throughout the 100 mile journey. I finished the "rebuild" in a lock up garage at the block of flats in Putney where my wife Evelyn and I had set up home. There were definite pluses and minuses about working in such conditions. Everyone living in the block would stop by for a chat, which meant I had to do most of my work on the car between 11.00pm and 1.00am. On the other hand I met some interesting people and a few very useful ones. Our social life flourished wonderfully.

With the car back on the road, c. 1970, and with most of the oil leaks eventually stemmed, we used the car for commuting to work and for camping holidays in the far north of Scotland. It was nothing for us to leave KPG on a jetty while we went off to walk round Orkney or wherever; carefree days! Then, in 1974, when we expecting the birth of our first child, the car was "speared" by someone emerging from a parking space (I was stationery in traffic!). I got the car back to Barnes, where we were living by that time, and put it away. Little did I realise that I would not drive it again on the road for 31 years, and counting.

Those years were spent (by the TC!) in a succession of car ports and garages. For five of them the hapless vehicle was under a rather sketchy sheet in a Cornish field, enjoying the stimulating saline breezes and salt-laden rain. Those are years of which I am not proud, but the exigencies of having to earn a living and bring up children (although the latter is not, I accept, mandatory) take their toll.

Now I find myself semi retired with enough space and time to atone for my sins, and have started a restoration. I have had the chassis repaired and straightened (properly, this time) and have purchased a new assembled body

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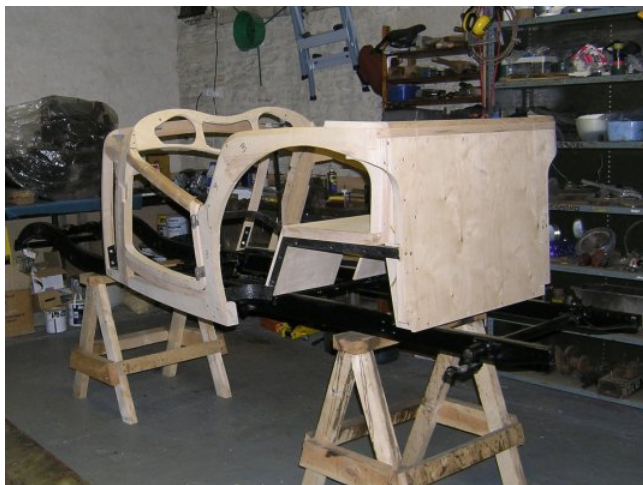


from Enrique Llinares of High Casterton. The first photograph shows the old frame with Evelyn crouched in it, realistically clutching the unattached steering wheel and wearing an expression of diabolical glee. The “after” picture shows the terrific new frame perched on the shiny and straight chassis.



I am hoping to get the rear axle ‘modded’ and made continent by Roger Furneaux and the rest, wisely or unwisely, I plan to do myself. I contrived to receive a carefully selected MIG welder as a Christmas present. Despite my well merited modesty, I feel bound to say that my work so far

on the scuttle and other panels is not nearly so disastrous as it might have been! The really big challenge will be the front wings: thanks to glossy literature I have purchased from John James I now realise that they do not match, being of different eras. I hope to disguise the differences in the course of repairing them. “When ignorance is bliss, ‘tis folly to be wise ...”



I am not setting myself any deadlines for the restoration. I have spent my life battling against those, and still have a few to contend with one way and another. But I will be disappointed if the car is not roadworthy by the end of 2006. If I really apply myself, or opt for the seductive “rolling rebuild” strategy, it might be sooner. Wish me luck!

**David Lewis**

# THE REBUILD OF TD17571

Those of you with good memories (mine's hopeless and getting worse!) may recall that we featured this car, owned by Malcolm Purvis in the November 2004 issue of TTT. Malcolm, who lives in Pau, in the South West of France, bought the car on EBAY and it was shipped to France from the USA in 2004. The TD was completely stripped down by Malcolm and here's a reminder of how it looked as a rolling chassis.

Malcolm has recently e-mailed me as follows:

"It has been a while since we corresponded!



First of all, let me express my appreciation for all your hard work and dedicated efforts to keep us all informed on the "Kimber Palace" events. From afar it seems that you have been successful in injecting some common sense into that debate and that a system has now been established to make sure that a properly prepared project could come forward for future consideration in a correct manner. Anyway Bravo!

Second, I have continued to enjoy TTT and, thanks to you, we have the best Register communications in the MGCC.

Third, I can report that I have made slow but steady progress on my TD restoration. The engine is now back in and it runs! The electrics all work as well (except the turn signal dash lamp...). The bodywork is also back together and there remains the installation of a heater, the interior trim & carpets etc and the hood to be re-installed plus some other tidying work. Attached is a recent photo (see page 18).

Fourth. Although my wife is generally impressed that everything that I stripped off the car has been put back on again and that I do not have a pile of unused "bits" in the corner of the garage I do have 2 left over flat plates (approx 5" by 3.5") for which I can find no apparent use! I attach a

photo of these too. I offer two bottles of Jurancon wine (the local wine renowned for its sweet and dry whites) to the first person to identify them! However, they will have to come to



SW France (Pau) to collect their prize in person or wait until I bring the car to UK (perhaps in 2007?)

All best wishes for 2006!

Regards, Malcolm Purvis  
[malcolmpurvis@wanadoo](mailto:malcolmpurvis@wanadoo)



P.S. The wine can be seen behind the car.....

**Ed's Note:** I thank Malcolm for the plaudits, but it is only fair to point out that TTT is a team effort and I get tremendous support from the Committee. This month, when I thought I might be short of copy, Committee members, Roy Miller and John Steedman duly obliged with articles and from the depths of Broadwoodwidge in West Devon, Roger Furneaux has sent me an article on fitting taper roller bearings. This will appear in the March TTT.

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Articles published in *Totally T-Type* are published in good faith, but the MGCC 'T' Register cannot be held responsible for their content. Always seek advice from a competent person before doing anything that could affect the safety of your car.

## **STUB AXLE INSERTS FOR THE TA/B/C MODELS**

***The fitting of stub axle 'pins' is not a new idea. There are beam axle T-Types around which have had this treatment – Register Secretary, Chris Sundt's TC springs to mind. What is new (in the UK), however, is the making of a jig by a Register member to perfectly align the spindle when it enters the bored out stub axle forging. In this article, Eric Worpe describes the operation using a broken stub axle, courtesy of Tony Roodhouse. The photos were taken by Clive Manser.***

Several TC friends have decided to replace their stub axle spindles after hearing about the occasional spindle failures. I became concerned after seeing one of the new spindles that had turned blue from overheating, despite being fitted by a respected engineering firm.

The replacement spindles are intended to be an interference fit in the bored out old stub axle forgings, which have to be expanded by heating to allow the new spindles to be pressed in. The degree of heating should be well below the original heat-treatment temperature of the carbon-alloy steel forging, which would have been chosen to give strength and fatigue resistance. Both these qualities could be degraded by overheating.

The new spindles on the other hand, are either left at room temperature or pre-cooled in a freezer compartment. In the case of the blued replacement spindles, the stub axle forgings must have been heated to a point where they were able to transfer enough heat to raise the temperature of the spindles to some 300 deg.C.

My concerns persuaded me to have a go at fitting new spindles. These were obtained from Bob Grunau in Canada and Tony Roodhouse kindly volunteered his broken stub axle for the experiment. The stub axle was secured in a machined disk, held in the chuck of a lathe. The boring out



operation on the stub axle (*above photo*) is nerve-racking, as the bore has to be machined quite accurately to give an interference fit of between 1.5 and 2.5 'thou of an inch. The next photo shows the bore being measured.



The main purpose for the interference fit is to clamp the spindle so that it is unable to rotate when the nut securing the ball bearings and spacers to the stub axle is tightened. The new nuts, which are more substantial than the originals, should be "torqued" to 125 ft.lbs to ensure rigidity of the whole assembly.



When the nut is correctly tightened, the inner races of the ball bearings and the spacers form the effective diameter of the spindle as far as bending forces are concerned. This reduces the dynamic fatigue stresses experienced by the actual spindle, a very good reason for not leaving out the spacer when taper bearings are fitted.

The new spindle is secured by its button head, which is pulled up against a machined shoulder in the stub axle when the spindle's nut is tightened. Heating up the stub axle and forcing the replacement spindle into position is a one chance only operation. If the spindle is slightly misaligned whilst being hammered or pressed into the stub axle, then it could seize up as the stub axle shrinks due to cooling down and thus fail to seat correctly. To



help alignment a jig was fabricated, (see *photo opposite*) from a heavy brass tube in which a nylon piston was free to float, but supported by a compression spring in contact with a sturdy base which screws into the bottom of the tube.

The photo to the right shows the nylon piston floating at the top of the tube with the stub axle about to be located on the rim of the tube. The nylon piston has been bored out to hold the new spindle so that when the spindle is inserted



through the stub axle into the piston, its shoulder just floats free of any contact with the stub axle (see photo to the left). This should set up and maintain the alignment of the spindle as it is forced into the stub axle to the point where

the button head makes contact with the shoulder in the stub axle.

It's important that the spindles' nuts are correctly tightened, as the integrity of the stub axle now depends on this aspect.

So far I've reached the stage where the extent of the interference-fit and how to achieve it accurately has been worked out. If we choose to heat up the stub axle in a domestic oven, which can reach 250 deg.C, then we can aim for a temperature difference between the stub axle and the spindle of

some 200 deg.C (allowing for some cooling down during the transfer from the oven to the alignment jig).

If the coefficient of expansion of steel =  $12 \times 10^{-6}/\text{deg.C}$ , then on a diameter of 1.125", 200 deg.C would produce an expansion of :

$1.125 \times 200 \times 12 \times 10^{-6} = 2.7 \times 10^{-3}$  or 2.7 'thou of an inch. So an interference fit of 2 'thou +/- 0.5 'thou is a practical starting point.

Machining the stub axle's bore to such limits can be accomplished by the use of a lapping tool to provide the final surface finish. The stub axle remains supported in the lathe's chuck, whilst the lapping tool is passed through the bore, having been coated with some fine carborundum paste. Whilst the chuck turns slowly, the lapping tool is repeatedly wound in and out of the bore with the aid of the lathe's tail stock.

The lapping tool is the next project. These are usually made from a tube of soft metal, such as copper, with an internal tapered bore which fits over a similarly tapered mandrel held in the tail stock. The diameter of the lapping tool can be adjusted by forcing the mandrel further into the tube, which due to the action of the tapers causes the tube to expand. Such a tool should allow fine adjustment of the bore diameter in the stub axle and also provide a smooth finish.

I'd like to thank Clive Manser for taking the photos and giving me encouragement and Roger Warren for the many chats on machining that have enabled a small part of his engineering expertise to be passed on to me, whom he describes as 'a bit of a Fred Dibnah'. **Eric Worpe**

**Ed's note:** I have a couple of pairs of new spindles for sale, which I will bring along to 'Rebuild'. One pair has been made by Bob Grunau and the other by Special Engineering Services of Crick, Northamptonshire.

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## FURTHER PARTS for the CW WIPER

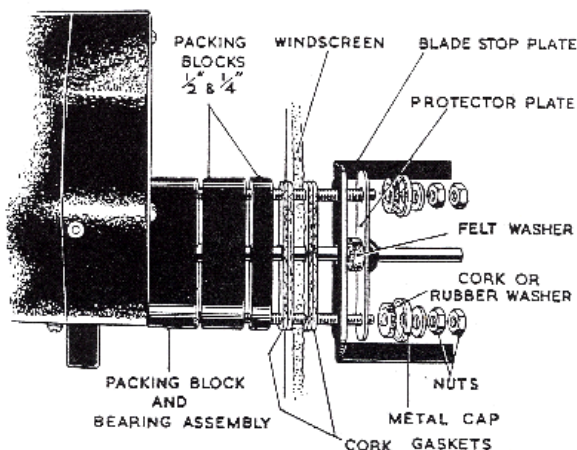
Eric Hayes –

Australia

*This is Part 1 of a follow-up to Eric's article in the July 2005 issue of TTT. I apologise for the quality of the diagram below.*

### SUPPLEMENTARY FITTING INSTRUCTIONS FOR MODEL CW WINDSCREEN WIPERS

It is important to mount the windscreen wiper in the manner shown below.



For clarity, the assembled parts have been shown in exploded form. It is particularly important to see that the two cork gaskets are positioned one on each side of the windscreen surround.

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Supplement to Instruction Booklet No. 819.

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## Figure 1

**Figure 1.** If studied carefully it will be seen that there are a myriad of small parts still needed to complete the installation of your CW Wiper. There is the protector plate, nuts, metal cap washers, blade retaining nuts, several other parts plus gaskets made out of cork, rubber and felt.

The blade stop plate, which has two arms that protrude forward and obviously by its name is to stop the blades travelling too far. How this can happen I do not know. Perhaps someone more knowledgeable than I in T Type matters can explain?

The spacing blocks seemed to be originally moulded in bakelite. I made one from canvas bakelite, using this material only as I had a piece on hand. If you have to make one I suggest approaching a plastic outlet for their advice.



Fig. 2

**Figure 2.** Shows the metal parts that might be needed to be made. The first metal part I attempted was the protector plate. This is made from 22g - 1mm- brass sheet the finished size is 5/8"x 2 1/8", but I would recommend starting with a larger blank, say, 3/4"x 2 1/4" blank, as in the drawing process that occurs during the forming of the boss, metal will be drawn in from the sides and could cause a scallop in the sides if there

is not enough material to resist this deformation. By making the blank wider will prevent this, and it can be trimmed later.

**Figure 3** Shows the tool made to form the boss. I made it out of 1" diameter aluminium (it is what I had). It takes a little experimenting to get the shape correct.

The punch - the main part - the shape of which will determine the shape of the embossment is basically 3/8" in diam.. and 3/16" long. Ideally the punch and the die should match one another minus twice the thickness of the material.

In our case it does not matter a lot although the punch should bottom in the die and when it does the clearance between the flange of the punch and the top of the die should be .005" less than the material thickness.

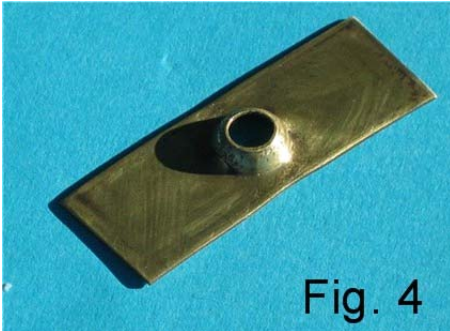
This is to iron out any wrinkles that might occur in the forming process.



Fig. 3.

The guide pin is steel 5/32" diam. or near to that but must be turned down to 11/64" diam. For a length of approx 3/8" to fit the hole in the die. This is the size of the hole that is to be drilled in the blank. The material will stretch in the forming process, and the hole will enlarge to have clearance on the 3/16" diam wiper shaft. If not, just run a drill through.

The groove shown in the top of the die is approx 5/32" wide and is for the forming of the two strengthening ribs each side of the boss. Before any shaping is attempted the blank must be annealed. This is achieved by heating it to a dull red and quenching in water, this makes it soft and more ductile.



**Figure 4** shows the boss formed in the blank. Now this operation has been completed successfully, the two reinforcing ribs can be made by lining the blank up parallel with the groove and formed by using a suitable shaped punch.

Remember, practice on an off-cut. Before attempting this operation. it is wise to re anneal the work piece as the forming of the boss would

have work hardened the material to some degree. The softer the material, the easier it is to work.

After successfully completing this operation, insert the job between the punch and die and give a good squeeze in the vice to flatten out any distortion that may have taken place.

Now mark out the centres of the two mounting holes and centre punch, and from these points, with a pair of dividers scribe the radii of the ends.

Drill the holes 5/32" diam., trim the sides and the ends.

Polish the top - if you do not have a buff - 1200 wet and dry and 'Brasso' with plenty of elbow grease, and your Protector Plate is ready for the platers.

Tick another one off the list



**Figure 5 The Finished Component**

(TO BE CONTINUED)

## **‘TIFF’ (FROM A DIFFERENT PERSPECTIVE)**

I came into this world on 6<sup>th</sup>.May 1954 in a place called Abingdon, one of three identical TFs. On 11<sup>th</sup>.May we left home without wheels or batteries, which did strike us as being a bit odd as all our friends were being driven away to showrooms around the country - but we still looked smart in our black paintwork. That colour choice should have given me a clue, because it was not long before I realised we had joined the Lancashire Constabulary. A very nice man soon fitted me out with special tyres, battery and all the other paraphernalia needed in a Police car (special speedo, radio and siren etc.)

Over the next few years I thoroughly enjoyed rushing around chasing criminals and errant motorists with my two regular PCs. on board, whom I might add, looked after me very well.

I knew this great life could not last forever and sure enough, in September 1958 I was stripped of my Police identity and sold at a car auction in Liverpool for the princely sum of £399 to end up on a garage forecourt. Now, being a bit of a poser it wasn't long before somebody from Coventry noticed my good looks and bought me.

During the next few years I had various owners, some who looked after me and some who didn't seem to care a lot. Ah well! Time moves on and around May 1972 I was sold to a nice man who really enjoyed driving me and really looked after me. OK, I thought this would do me nicely to see my days out. But no! Old age was catching up on me and my then owner decided to start what I think he said was a rebuild. Hang on a minute, I could have sworn he said, "rebuild"! - then he started stripping me down to my bare bones, with bits and pieces all over the place in the shed and garage with my chassis left out under a tarpaulin in the garden. I have later discovered that this is a common trait with humans, full of enthusiasm to start with, which very quickly wanes and nothing ever gets finished. After a few years sat forlornly in the garden I had given up all hope, especially when the tarpaulin disappeared one windy night and was never replaced.

After what seemed like an eternity, suddenly one Saturday morning in 2002 there was my owner talking to a chap from Hastings on the south coast and it soon became apparent that I was up for sale. He seemed a nice guy as he gently found my rusty bits (I must be honest and say that by this time there were quite a few) and he got all my bits out of the shed and garage. Alright they were all a bit rosey but I think most of the important bits were still there.

Then nothing happened for a fortnight until this same guy turned up, complete with trailer and before long I and all my bits in boxes were on the way to the seaside. 450 miles later I was ensconced in a nice warm dry garage surrounded by boxes and boxes of bits, which Mel (my new owner) soon had sorted and listed. The next three years are a bit of a blur, everybody kept telling Mel that he must be mad, but thank goodness he didn't listen or perhaps he

didn't want to, as my long awaited rebuild happened with all new or rebuilt parts and a very smart red paint job.

I must mention at this point Mel's very understanding wife as he seemed to spend more time with his mistress (me) than her and yet she even delivered bacon sarnies when we were together around at the garage to keep him going. Thanks Doris!

I understand that you have already been bored silly with Mel's account of the rebuild so I won't go into details, suffice it to say I am now back on the road and posing worse than ever, especially after I learnt that we had won an award from the 'T' Register.

Right where's the red carpet and the champers?

**'Tiff' Brookes**

**Ed's note:** The photo below shows Mel Brookes (*on left*) being presented with the Malcolm Hogg Memorial Trophy by Tickford Registrar, Rod Sawyer. Mel is the first holder of the award for his outstanding achievement in salvaging an absolute wreck of a TF (sorry 'Tiff' but that's what you were!) and rebuilding it to a very high standard of which Malcolm would have been proud.

I'll let you into a little secret..... Mel is currently lying down in a darkened room and asking to see his psychiatrist (who's away again on holiday). The reason? Mel has bought another TF in need of tender loving care. I just don't know how he's going to break the news to 'Tiff'!



## Scary Story with a Happy Ending

***Those of you who are intending to tour the Continent this year (mainland Europe for our overseas readers) would do well to read this article by Register Secretary, Chris Sundt. I have been “sitting on” this article for longer than I should, so apologies to Chris.***

Since taking my TC on the T-Type Continental Tour in 1996 I have toured bits of Europe almost every year with T-Type friends. Overall we had little trouble until a trip to the Dordogne a couple of years ago – when we seemed beset by problems of which the most serious was the apparent collapse of the diff in a TD. But I get ahead of myself.

A group of 4 cars (TC and 3 TDs) arranged to stay in a farmhouse in the Dordogne for a week, taking 3-4 days to travel each way. We do like leisurely travel with plenty of time for stops to refresh the inner self and to admire the views. However, the first day was somewhat rushed as we had to catch a lunchtime ferry at Dover and then dash for a B & B (*Bed & Breakfast accommodation*) about 150 miles away in Normandy. All was well until we were close to our destination, when we decided to stop for refreshments – and to buy a couple of bottles of wine for those unexpected al fresco moments. We had all parked on a wide pavement edge, as is common in many French towns. As we drove off one of our number, in a TD, appeared in some trouble. The throttle peddle had snapped off at the bulkhead. We later surmised that the car had been converted from LHD, the pedal having been cut off and brazed on the other way round – and the brazing had fatigued. A little ingenuity and cunning use of a mole grip had throttle control restored in no time. We'd sort out a proper repair later. Off we all went again. As that same TD dropped off the curb the rear axle gave a strange clonk. Thereafter it made the most alarming grinding noises, especially when the load on the axle changed (such as when lifting off). It proved bearable if the speed was kept under about 30 mph so we crawled to the B & B. Once unpacked and sorted we took a closer look at the axle. Something was clearly very wrong – the pinion shaft could be moved in and out about ¼ inch! We dropped the end of the prop shaft but the pinion nut seemed tight enough. A TD diff cannot easily be removed as the whole axle casing has to be split, and resetting the pinion bearings is a tricky operation requiring special tools (we thought).

All seemed lost and we resigned ourselves to sending the TD back home on a trailer. We called Green Flag (with whom we had classic car breakdown insurance) and, after much discussion, they agreed to arrange a pickup for delivery to a local recommended garage. The garage would assess the situation and decide whether to repair the car or to ship it back. We went and ate (an excellent meal) more relaxed. A mistake!

Next morning a flatbed truck arrived. It had clearly seen better days and was accompanied by a surly monoglot French driver. After much discussion (two of our party spoke a little non-technical French) we managed to establish (we thought) that he would take the car to a Rover (or English car) dealer in the local town about 5 miles away. We set off following the smokey, slow, decaying lorry – and drove straight through the town into an industrial estate in the hills. We eventually turned into a scrap yard where some very odd things were being done to a tatty Mercedes. The person in the office (a shed, and the only building on the site) did speak some English and took a look at the rear axle of the TD, announcing that he would get spares delivered in the morning and fix the problem. This we found hard to believe partly because he had not even stripped the axle down as far as we had (so clearly had no idea what might be wrong or what spares to order) and partly because we did not get the impression he had any idea how the rear axle of a TD was constructed. We were all thoroughly depressed.

We called Green Flag again, who were not at all helpful at first. They insisted that the “garage” was perfectly capable of making the appropriate mechanical judgements and repairs and that they would not move the car until that had been done. On the contrary, we saw a scrap yard where wheels were being replaced on cars with studs missing and with no workshop facilities or cover for the car.

Then one of our number had a brainwave. That year at Silverstone I (yes, it was me folks!) had seen and taken a copy of the European Touring Handbook. For those of you who haven't seen it, this contains details of all the MGCC organisations across Europe. It includes, for each country, a list of people offering spare parts and workshops. I had, for no particular reason, thrown it into the car as we left. I fetched it and we saw there was a listed garage near Tours (about 150 miles away). We called them and they seemed happy to look at the TD if we could get it there. It took a great effort to get Green Flag to agree that the garage in Tours, as a specialist, was far better equipped to examine the TD than a scrap yard, but we did, eventually succeed. We gave the person in the office the address of the garage outside Tours and he agreed to get the TD there by noon the following day. We left to hire a car for the TD-less couple and, eventually, got to the next B & B, also outside Tours, late that evening.

The garage was in a village just south of Tours and when we arrived the following morning our hearts lifted. No TD (we were a little early) but this was clearly the garage of an enthusiast. M. Perou (the owner) raced an Austin-Healey 3000 and the place was littered with classic British sports cars – lightweight E-Type, DB2/4, Austin-Healeys, TR4, Sunbeam Tiger – even a dusty TD parked in the back. He was most helpful and even offered



to strip bits off the parked TD if he could not fix the problem. We decided to wait in a café on the square in the village for the lorry, although we did not see how the decrepit truck that had wheezed its way to the scrap yard could possibly make it this far. At around 12.30 a relatively modern flat-bed swung through the square with the TD on it. We hailed it and led him to the garage where the TD was unloaded.

But the garage was deserted – it being lunchtime. After a while a mechanic appeared and indicated that he would look at the TD. We pushed it onto a ramp and he proceeded to strip the rear axle. The prop shaft was wedged out of the way with an oily piece of wood that was just the right size from a box of such pieces. He had the pinion shaft bearings and spacers out of the diff nosepiece (you can't do that, we all cried) in about five minutes. We began to relax, here was someone who clearly knew his way around a TD rear axle. He fiddled around for a bit and then came over and explained (mostly in sign language as his English was not that good and our technical French even worse) that the spacer was too short, allowing the pinion bearings to move on the shaft. We can only surmise that, when the diff had been rebuilt (not by the then current owner of the car) one of the bearings did not seat properly. The bump off the curb had caused it to move, creating the slack. Within another ten minutes or so the mechanic had made up an additional spacer and started reassembly. About 40 minutes after being pushed onto the ramp it was driven off with no diff noise at all! We then, somewhat guiltily, showed him the broken throttle pedal. He smiled, and set to, removing sufficient brackets to enable him to weld it back on. Within the hour we were on our way. Well, actually, that was complicated as we had to return the hire car to an office in Tours, but the TD was no longer a problem and behaved impeccably for the rest of the trip.

The bill came to a mere FFr 300 – now 44 Euros! (about £30) so we left a substantial tip.

So remember – when touring on the continent things can go wrong. But, if you have a copy of the European Touring Guide you can find someone who might be able to help.

**Chris Sundt**

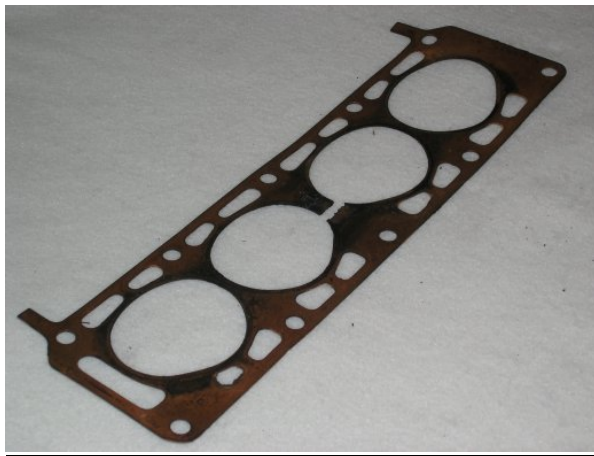
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## Head Gasket Failures

by John Seim

### Why do they call a failed head gasket “Blown”?

Some time back, it might have been 12-18 months ago – time passes so quickly! – the head gasket “blew” on TC0750. At first I thought that the manifold gasket had “blown”, as the noise was similar, but a significant loss of power made me realise that there was something more serious afoot.



Now, with around 3,000 miles on the clock since the gasket was replaced and with no problems (touch wood!) I often wondered about the cause of the failure. Well, I learnt a lot from the following article by John Seim, which first appeared in the October 2005 issue of “Octagon Topics”, the magazine of The Vintage MG Club of Southern California and was reprinted in the November 2005 issue of “mgTalk”, the magazine of The Southeastern MG T Register, Ltd. The article is reproduced with John's permission.

“One of the most common problems with the XPAG/XPEG engines are failed head gaskets. The head gasket develops a break between two adjacent cylinders (as happened in TC0750's “blown” head gasket in the above photo), and this is where it generally “Fails”. The compression stroke of the engine forces (blows) compressed air/fuel mixture into the adjacent cylinder. You experience loss of power and a definite noise (yep!). Overheating may also be a symptom. You remove the cylinder head, see the broken gasket section, and determine that the gasket failed due to prolonged usage. What you have seen is the effect; the real cause has yet to be determined.

The cylinder head gasket is of a sandwich construction, with copper or another soft metal facing, and a dense fiber center layer. They can also be a solid sheet of copper. For best adhesion, and to ensure no head gasket leaks, the head gasket should be coated with CopperKote, or a metallic spray paint, or torqued down properly. A solid copper head gasket can be used, to increase the combustion chamber area of the cylinder head. Obtaining a thicker solid copper head gasket can be done from [www.Gasketworks.com](http://www.Gasketworks.com) This will lower the

compression ratio. The M.G. Factory called out a minimum 40cc combustion chamber for the XPEG engine.

The XPAG/EG engine is a long stroke engine, one where the piston travels a great distance inside the cylinder. You can have a high compression engine with a long stroke or short stroke engine. It all depends on the swept volume of the cylinder. This is the volume of the cylinder, from the piston at bottom dead center (B DC) to that of the piston at top de milled.

The 1250 or 1500 cylinder heads started out with a thickness of 3.022". Milling the heads to ensure a flat surface, or to raise the compression ratio, probably has been done, and possibly several times. The minimum head thickness is 2.897" measured at the front or rear of the head, top to bottom machined surfaces. Easy ways to tell if your cylinder head has been excessively milled are one of two visual checks. The side of the head where the push rods pass through was recessed from the machined cylinder head surface.

If these surfaces are the same height, then you are getting near to the minimum thickness. The thin metal will create a hot spot, most likely resulting in detonation problems. Higher compression yields higher temperatures. Using a thicker head gasket will lower the compression ratio, and lower the generated temperatures.

When a head gasket "blows" between two cylinders, hot gases pass through the opening, each time each of the two adjacent cylinders goes into its compression stroke. These hot gases act like a cutting jet, removing metal from the gasket, the head, and the block. It is a general practice to have the head milled flat when the engine has had a cylinder head gasket failure. But what about the block? They are both made from cast iron, so they should both wear. A level surface is also required when there had been a blown head gasket, and material has been removed from the block surface where the head gasket was compromised. You can draw file the block surface to obtain a flat enough surface for a cylinder head gasket to seal. This is done with a fine cut file, travelling the entire length of the block. Look for areas where the file does not make contact with the block surface. Continue draw filing until all areas show contact.

Stretched cylinder head studs can be a source of gasket failure. The head studs can be measured along their length, to look for stretching. When in doubt, throw them out. When releasing the tension on the cylinder head nuts, if they break free with a "snap", the studs are probably OK, if the break free is a gradual thing, this could indicate stretched material.

Overheating, or difference in the temperatures between the cylinders, is another source of failure. The thermostat is a temperature regulating valve, working to keep the engine at a constant temperature. Removal of this regulating valve can present temperature variations within the engine. Cold air coming in through the radiator can chill cylinder no. 1, while cylinder no. 4 at the rear of the engine compartment, will be substantially warmer. Blockage of

water passages to the cylinder head can also affect the temperature differentials. You have all read that you need to use a banana hole head gasket on all banana hole block and head combinations, as well as a mixed block/head combination. The manual explains that it is due to different water hole configurations found in round vs banana hole gaskets. It is also due to the round rings around the round hole gaskets might not fully seal when compressed with a banana shape surface.

Carburation can also cause temperature differential between two cylinders. With multiple carburettors, the threat is greater than with a single carburettor supplying the engine. Air/fuel mixture flowing into the cylinders can be rich or lean. One carburettor can be lean, due to air leaks or needle jet settings, thus leaning out the mixture supplied to the cylinders. The other carburettor can be supplying a rich mixture. A lean mixture burns hotter, while a rich mixture burns cooler. The hotter and adjacent cooler temperatures can fatigue the gasket, resulting in the blowing of the head gasket. Where fatigue might not be the correct word, the temperature differences on the two sides of the gasket can cause the metals to expand at different rates, creating minor warping of the gasket surface where the hot gases try to penetrate.

Ignition timing can also contribute to the problem. Retarded spark timing results in hotter engine temperatures. Improper mechanical advance curves can make an engine run hotter. A bad cam lobe can fire one cylinder at the wrong time, making the cylinder hotter than adjacent cylinders.

So you can replace the gasket, have the head milled, and experience the problem some time in the future, or you can look at all the possible causes of the problem, perform all the necessary corrections to the problem, and eliminate the problem."

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## THE PROBLEM WITH 'BUMP'.....AND THE SOLUTION

*The following letter has been received from Gerald Dawe. It is addressed to all the participants of last Autumn's Shropshire Tour, but it is, of course, of wider interest to all 'T-Typers'.*

"Firstly, may I congratulate you and all others involved in the T-Type weekend at Shifnal, which we thoroughly enjoyed for the all too brief time we were with you. Secondly, a big thank you to all those who offered us assistance, both at Ironbridge, and back at the Hotel.

Our TF, affectionately called 'Bump', because of its number plate, had run faultlessly for the 180 miles to the Hotel. It started first time on the Saturday morning as we set off on the first part of the Run. However, on the



hill down into Ironbridge the engine cut out and despite attempts to bump start refused to run. We coasted onto the roundabout at the bottom (the one you have to turn round 450 degrees to get to the Ironbridge exhibition) and would not start. Disconnecting the petrol feed to the carburettors showed ample fuel being pumped so the fault was diagnosed as electrical. A quick check showed no loose wires and as members of the AA, assistance was requested. The patrol came within 20 minutes and agreed the fault was the ignition. The low tension circuit was checked and found OK. The coil was producing a spark and the patrol considered the problem the condenser. As a replacement was jury rigged, the patrol commented that 'thank goodness it was not a modern MGTF' as was recorded in his call out and stated 'I will have you going in no time'. Unfortunately, the new condenser did not solve the problem. A replacement coil was then fitted with no success. After some 1½ hours, now in pouring rain, the patrol gave up and requested a relay by the AA back to the hotel. We arrived back at 2.30 pm and after lunch watched the third day of the Oval test. The rally returned early evening and 'Bump' received massive attention with no success.

An appointment was made to solve the problem early Sunday morning. Unfortunately after cleaning the carbs, another coil, new points and replacement rotor arm 'Bump' was not going anywhere. We waved goodbye to the rally and called the same AA Relay to be taken back home.

Back home on Sunday evening we thought of you all at the vineyard and wining and dining the night away and wished we were with you. The only consolation was that on the Monday we watched England win back the Ashes whilst you travelled home.

Tuesday was the time to have a strict word with 'Bump'. By twisting the distributor the engine was made to run like a tractor, cylinders 1 and 2 firing into one another. A word to Peter Edney suggested a blown cylinder head gasket. A compression tester gauge was borrowed which showed good even compression. (A George Edney unleaded head was fitted some 6 months before.) The garage then lent a pressure tester which showed cylinder leakage of 4 to 6%, an excellent result. The engine was in fine fettle. A 'blitz' of electrical parts were then ordered and on the Thursday a coil, points, rotor arm and distributor base-plate including condenser arrived. All these parts were fitted and 'Bump' burst into life. But which part was causing the trouble? The original coil was put back and the engine ran. The rotor arm was put back with the same result. Likewise the points. The AA condenser was then put back. The engine refused to fire.

A visit was made to the local seedbed centre to an electrical specialist. On drawing up in the TF the boss came out and said "do you know George Edney" he had a unit here! (Who doesn't know George!!) I purchased a condenser similar to that fitted by the AA and another to fit the old base-plate. The cost of the two was £3. To satisfy myself that the problem was really solved I had tested the original condenser, the AA condenser, the condenser similar to the AA condenser obtained from the Seedbed centre and the new condenser supplied with the base-plate. The first two were open circuit and useless, the third OK and the fourth was showing signs of breaking down, although new. The electrical engineer was very critical of soldering the condenser to the base-plate and was of the opinion that the heat would break down the insulation. The part was returned to the supplier and received back with a new condenser held to the base-plate with a clip and screw and not soldered!!!!

The moral of this sad tale? Do not assume that a replacement part works and do not look for complications before the obvious has been discounted at least twice. The AA were pleased to pay for the two relays and gave an extended membership which we thought in all the circumstances to be very fair. Bump is booked in for Harrogate. We will be coming with a replacement base plate and spare condenser, so please do not hesitate to ask should you be unfortunate enough to have a similar problem.

On a brighter note, now the engine has been retimed 'Bump' is performing better than ever and notably smoother and quicker.

Again, a big thank you to all those who offered assistance!

**Gerald and Judith Dawe and 'Bump'.**

|

## NEW BRAKE DRUMS FOR TA/B/C

I have finally taken delivery of 16 new brake drums. They are machined from solid in EN8 and are to the same pattern as the originals. The original drums were a steel pressing of 9/32" thickness, but I am told that the 9/32" wall thickness was not maintained on the whole of the brake path due to the steel pressing process. On the new drums, the 9/32" wall thickness has been maintained for the whole of the brake path, so they are altogether a stronger



drum. I have tested two of these drums on the front of my car and there is a noticeable improvement in stopping power. For normal road use they do not get hot (they barely get warm) but having tested them on a long downhill descent (from the top of Lansdown in Bath down to Weston village, for those of you who know the road), the drums did get hot. However, they do appear to cool down quite quickly, since by the time I had reached the centre of Bath and stopped again, they were barely warm. The drums are being offered for sale to T Register members **only** on a non profit making basis for £95 each. I hope to bring some along to MG Spares Day at Stoneleigh on 19th February and to 'Rebuild' in March.

Also offered on a non profit making basis are exchange brake shoes with bonded (as opposed to riveted) woven linings for TABC at £27.50 per axle set. This is a service which is growing in popularity and I will be bringing at least one set along to Stoneleigh and also to 'Rebuild'. I could offer the same service for TD/TF but I need some shoes!



Just enough space to bring you some news for Steve Taylor of Stafford Vehicle Components Ltd. Over to Steve....."We are planning to commence selling modified generators for T A, B & Cs. These will look just like the original, but will have a lighter weight body, inside which will be lurking a 20w alternator. It looks like the final selling price will be about £450 inc Vat, and there will be a refund if the old dynamos are returned to us, but I expect most owners will want to keep the original unit. I hope to have a small quantity at the MG show at Stoneleigh on February 19th."



**MG TF MIDGET SPARES** Scuttle top panel £60, Scuttle top frame £60, Metal dash panel £100, Body frames LH and RH £50 pair, King pin and stub axle LH and RH £100 pair, Set of door hinges £50, Delivery could be arranged in Southern Home Counties, otherwise buyer collects.  
Peter Haynes 07890 943 489 (West Sussex) or e-mail p617haynes@hotmail.com

**VW steering box conversion for a TC** made by Deiter Wagner. The kit is brand new and has never been fitted to a car. Comes complete with modified drop arm and chassis bracket complete and ready to fit. Only for sale due to change of plans. £400 (save yourself £50). Please call Mark. 0208 859 3780.

**Misc Spares** 1 very good wiper motor £60, 1 new TD dash board – varnished – professionally made, probably for RH drive TD £25, 1 pair of twin 1¼" SU carbs complete with all connecting rods, good condition £80, 1 pair 1½" SU carbs, not complete £40 (all plus P&P) Bill Tonks 01429 838683

**Wanted** Pair of rear shock absorbers Wanted for 1947 TC. Any condition considered. Required for Tony Read in Southend but as I do not have a telephone number or e-mail address for him, please contact me, John James 0117 986 4224 jj@octagon.fsbusiness.co.uk

**Wanted** distributor for TD, early type D2A4, no. 40162 or equivalent. Tel: 01630 653973 (Keith Hodder, Shropshire) or e-mail [hoddmill@luna.co.uk](mailto:hoddmill@luna.co.uk)

**Wanted** TC original 3 spoke steering wheel in usable/restorable condition. (I have a good original brooklands wheel which may be available to swap), TC achometer. TC tacho drive reduction gearbox. TC petrol warning light. TC diff plug. TC dash-lamps in usable/restorable condition. Please call Mark on 0208 859 3780

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