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THE EDITOR

One disadvantage of having one's e-mail address readily accessible on the Internet through the Register website is that the "spammers" get to work on you. I kid you not, but I reckon that I get at least 40 "spam" messages a day. Quite a few of these seem to think that I need a certain part of my anatomy enlarging. Fortunately, the delete button is used morning, noon and night to get rid of this unwanted intrusion into my e-mail, but I have often hankered after a "destruct button" which I could "fire" back at the "spammers" and blow up their computer systems. A similar gadget would come in useful to "fire" at the sound systems of 'yobbos', who drive around in cars emitting mega decibels. What fun it would be to observe a puff of smoke rising from their sound systems with peace and tranquillity restored!

However, the advantages of the website in terms of being able to communicate with members cannot be overstated, not forgetting the tremendous amount of regalia business it generates from on line ordering. It also ensures that the Register occupies a 'pole position' amongst T-Type owners worldwide through the electronic version of **Totally T-Type** which is read by at least twice (and probably, three times) as many 'subscribers' as the 'hard' copy version.

I'm pleased to say that my computer 'guru' is back from his round the world trip, albeit he is planning further trips to South America and Russia. He has just installed a new Dell computer for me, complete with stand alone back-up hard drive. He is also working on some website enhancements, which include a fully searchable index for TTT, a panel on the 'home' page which gives details of recent updates and an expanded racing section so that the racers can talk to each other. I had promised an article describing these enhancements but unfortunately there isn't the space in this issue, partly due to the fact that MGCC Council business needs to be reported on.

The "Chinese puzzle" of just what is going on with the possible resumption of MG production is not getting any easier to solve. The signing of the lease for part of the Longbridge site grabbed all the headlines, but the existence of a 'get out' clause after 6 months didn't escape attention. Nanjing Automobile, the Chinese carmaker that bought MG Rover for £50m*continued on page 4*

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late last year has announced plans to resume production of the MG TF at an annual rate of up to 10,000, starting next year. Yet the path seems to be strewn with obstacles.... For a start, Shanghai Automotive Industry Corp (SAIC), one of Nanjing's rivals, owns the design rights of the TF and has just announced plans to begin producing (in China) Rover-based cars later this year. It is reported that the planning authorities in Beijing have been keen for the two companies to join forces and produce Rover cars together, but SAIC have decided to go it alone with its first vehicle being based on the Rover 75, but not necessarily being called a Rover (BMW still owns the Rover brand name). Add to this that Phoenix Venture Holdings is reported to be demanding £2m for the TF tooling and a potential partner for Nanjing is not yet 'in the bag' and one can see that the prospects of resuming production (of a sports car, which is now over ten years old) are far from assured.

The "mystery photo" competition in January's TTT was won by Bryan Sieling of Arlington, Virginia, USA. Bryan correctly identified the two plates as support plates for the horns which are mounted below the firewall (inside the car) to give the horns more stability in their mounting. It didn't help matters that I failed to give Malcolm's full e-mail address, so sorry for this. Two UK subscribers who I know got it right were Ron Drake and Jon Goddard. Jon suggested that perhaps we could have a regular "What's this?" photo in TTT. What a good idea! – over to you readers – I might even be able to offer a small prize!

What do you know about car servicing costs? Whilst I was listening to Radio 5 the other day I couldn't help chuckling over a comment from Wayne Robinson, the Technical Service Manager of Audi UK that "some of our vehicles have up to 35 computers all talking to each other". Mr Robinson was responding to criticism about high servicing costs as apparently, Audi are somewhere near the top of the league when it comes to vehicle servicing costs. I reflected on T-Type motoring (minus 35 computers) and reminded myself that I have my own talking "computer" occupying the passenger seat in the TC when I am asked "What's that rattle?" and, more disturbingly. "What's that burning smell?"

Just room for a couple of "commercials". Firstly, those of you who receive "Safety Fast!" will already know from the March issue that the Register has produced a high quality reproduction of a 24 page TD Sales Brochure which has some colour pages. The price is £5 plus £1 postage (UK), £1.75 (EU) and £2.50 (Rest of World). You can order from the Regalia Secretary, John James, 85 Bath Road, Keynsham BRISTOL BS31 1SR enclosing a cheque payable to MGCC 'T' Register, or quoting your credit card details (£1.00 handling fee). The details required are type of card (Visa or Mastercard), name on card, expiry date of card, 16 digits on front of card, 3 digit security code on reverse of card. Please do not send these details by e-mail as it is not secure. Alternatively, you can order securely from the Regalia section of the Register website www.tregister.org using your credit card through PayPal.

The items for sale and wanted are on page 38 this month. Look out for an offer on new PLC6 switches from Arras Fiori of The Old Lock and Key Company

T REGISTER NEWS (Compiled by John James)

Chairman's Report

It has undoubtedly been another remarkable year for the T Register. We should all be very proud of the performance and standards achieved in all our events throughout 2005. We started in March with 'Rebuild', which was a sell out, yet again. Committee member Peter Cole produced another action packed and interesting programme of speakers, whose subjects kept the interest of those present right to the end. It seemed that many were reluctant for it to finish!

There followed a more lively than usual AGM, with very keen interest in proceedings at the previous day's Council meeting. In particular, members were most anxious to learn of the Board's proposals for Kimber House.

The Shuttleworth T Party, inaugurated by Paddy Willmer, has now been rejuvenated by Graham Brown. Graham has built on the theme of a pre-party gathering on the previous afternoon (Paddy's final innovation) and a pub meal in the evening which has proved very popular and successful.

The Silverstone International meeting came next. A marquee held a fine assembly of T-Type Specials, which was again organised by Keith Hodder. For the third year running we held our Friday evening 'Natter' with the Campers, T Racers and what seemed like half of the visitors to Silverstone. We were not quite overwhelmed, but it came close. An enjoyable evening was had by all.

The Autumn Tour, based on the Park House Hotel, Shifnal, Shropshire was another stunning event, held over the weekend of 9-11th September wonderfully organised by Roger Still and Kay and John Wray. Each year there seems to be a new innovation and this year's was a visit to the Wroxeter Roman Vineyard, who had especially produced and bottled MGCC T Register Roman Red. Two bottles of each were allocated per car.

The Gala Dinner was marked by the inaugural presentation of the Malcolm Hogg Memorial Trophy and we were delighted that Sheila Hogg, supported by members of her family was able to present it to Rod Sawyer, who collected it on behalf of Mel Brookes, who could not be with us on this occasion. Another Trophy presented *in absentia* was the Montague Burton Trophy presented to Derry Dickson (he resides in Argyll and Bute) John and Claudette Bloomfield very kindly diverted, whilst on a trip to Scotland, to present this to Derry and Carol. The T Register Committee and the Secretary in particular are greatly indebted to John and Claudette for undertaking this task. The Marque of Friendship is a pleasure to report on, for both these occasions.

On the 17th September a dedicated event to mark the 60th Anniversary of TC Production was held in the countryside around Abingdon with runs throughout Oxfordshire and Berkshire, Old Factory Tests routes were followed to the top of Uffington (of White Horse fame) where a glass of bubbly and a piece of

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anniversary cake were consumed. Then followed the descent downhill to the Black Horse at Gozzards Ford for a celebration lunch.

Fifteen cars took part and all the participants expressed their sincere thanks and good wishes to John and Tricia Venables who had organised the entire proceedings. Your Committee in its entirety endorsed these sentiments. Where would we be without the dedication of such enthusiasts to the MG movement who give so freely of their time for the benefit of us all?

The Year concluded on 9th October with the "Practical Skills Workshop" held at Peter Edney Classic and Sports Car. Again, this event was a complete sell out. The participants were all full of praise for the venue, content and hard work put in by Committee member Graham Brown (I hear he was backed up by the ever able and willing assistance of his wife Sue). Of course, our thanks go to Peter Edney and his staff and helpers who made the day such a success.

The above events have been reviewed in detail either in our Register spread in *Safety Fast!* or in TTT. As I write, we have had 13 Issues of Totally T - Type. The inspiration to produce this publication in the first place and the subsequent hard work to bring it to the printers every other month and then mail it to all of those requiring 'hard' copy has been the single minded dedication of one stalwart on your Committee - we all owe John James a huge debt of gratitude, he is an inspiration to all the Committee. In addition, he runs our Regalia Sales single handed and generates substantial income for the Register, which of course, is the life blood for register development and innovation.

I must express my sincere thanks to all the Committee members for their dedication and hard work on behalf of the T Register - we all benefit from their efforts and without them there would be NO Register. The events I have mentioned above do not just happen, they are the result of forward planning, detailed discussion and financial backing in committee and by the Committee we do NOT receive any financial support from any part of the Club, other than those members who purchase the Regalia we offer.

Please, if you are retired or have some time to spare, make the effort and join with us to continue the progress and development of the T Register - you do not have to be a dedicated committee member, *ex officio* members are equally welcome. Contact any member of the committee, Secretary, Chairman or John James, we will be happy to discuss how you could help us.

In conclusion I must confess this has not been an easy year with the concerns over plans for a New Kimber House. A large majority of T Register members and your Committee believed this was ill-considered and questioned the need and affordability for such a scheme. We are glad it has been axed.

We extend our thanks and appreciation to the Staff at Kimber House for their help and support throughout the Year and wish all MG members a happy and eventful 2006. Keep your MG wheels turning and hopefully your hoods down, look forward to seeing you out there!

Dennis Barker

EVENT UPDATE

1. 'Rebuild' 2006 By the time you read this, 'Rebuild 2006' will have taken place. As I write these notes in the second week of February, Organiser, Peter Cole, reports that we currently have 60 applications. On the basis of previous years' experience there is always a rush for tickets in the last few weeks, so it looks as though we will have a "full house" of 100 'Rebuilders'. Peter also reports that there has been a change to the programme. Unfortunately, it won't now be possible to run the Question and Answer session on Instruments and in its place we will now have a presentation on stub axle replacement by Eric Worpe.

I am planning on running an article on some, if not all, of the sessions for the May Issue of TTT.

2. Annual TA 'Natter' As mentioned in January's editorial, this is being held at Radley College (near Abingdon) on **28th May** and coincides with the start point of the Abingdon Works Centre's Old Speckled Hen Run. The 'natter' is being held whilst the Run is in progress and there will be a cream tea on the Run's completion. Dave Heath is organising the 'natter' and he can be contacted on 01934 625242. Dave would welcome expressions of interest as soon as possible, please.

3. Silverstone International Weekend The date for the Weekend is now confirmed as **23/24/25 June**. We shall be hosting our usual Friday evening 'natter' and the Register stand will be situated in the Main Club marquee. Further details will be given in the May TTT.

4. Shuttleworth 2006 – 'T' PARTY Organiser, Graham Brown, has now reserved 60 places 'front of house' (*see photo from last year's event overleaf, courtesy of Peter Morgan*) for this year's 'T' Party and Summer Air Display at Shuttleworth Air Museum, which takes place on **Sunday 2nd July**. The price of a ticket is £16 per person and this year this includes entry to the adjacent and attractive Swiss Garden (*briefly described in January's TTT*).

For those who wish to come along for the **Saturday Run**, Graham has organised a route to start from Bedford by midday along a picturesque drive eastwards over The Greensand Ridge to the National Trust's Wimpole Hall for a two hour lunchtime stop, followed by a run back to the RSPB at Sandy for a teatime stop and (optional) walk, and maybe Moggerhanger House prior to a meal at Great Barford. Attendance at Great Barford is optional, but Graham has reserved spaces for 40 people to have an evening meal at 'The Anchor' which overlooks the River Great Ouse and adjacent historic bridge. As last year, there will be an accommodation list for the local area **for those who wish to make this into a two-day event.**

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Further details with application form are available from Graham on 01234 358729 e-mail graham@isisbedford62.freemove.co.uk or by 'snail mail' to him at 12 Isis Road, BEDFORD MK41 7BP. This event is normally fully subscribed so please apply as early as possible.

5. The Autumn Tour This year's Tour is based on The Cedar Court Hotel, Harrogate, North Yorkshire and takes place on **01/02/03 September**. The Tour has been fully booked for some time now and Organiser, Grant Humphreys has had 61 booking forms returned to him. Inevitably, we get the occasional cancellation, so if you wish to register as a reserve to take up a place in the event of this occurring please contact Grant on 01706 642688 or e-mail grant.chumphreys@btinternet.com

6. Practical Skills Workshop This will be held on 17th September (not 24th September as given in the Club calendar) at the workshops of Peter Edney Classic & Sportscar in Leaden Roding, Essex. Organiser, Graham Brown intends to distribute a questionnaire at 'Rebuild' which will seek preferences for subjects to be covered on the Workshop.

Report of "Kimber House" Sub-Committee

Members may recall from the report in the November, 2005 TTT that the October, 2005 MGCC Council meeting instructed the Directors to halt all work on the 'New Kimber House' project with immediate effect to stop the costs escalating. Council further agreed to the formation of a Working

Party, being a Sub-Committee of Council, with the brief to carry out an examination and assessment of all available Club Office options and assessing the Club's office accommodation needs. The Working Party to report its findings and conclusions on or before the Council meeting to be held in Autumn 2006, with an interim report to the Council meeting in Spring 2006. The interim report has just been released and further details are given on page 34.

News from Stewart Penfound, TA/B/C & Specials Registrar

Stewart has written in the following terms:

"In looking through our records, I see there are quite a lot of cars listed where their chassis numbers are unknown. This is because over the years we have recorded cars by registration number from pictures/articles in magazines, sightings on the road or at events etc, all of them instances where it has not been possible to obtain the chassis number. These cars all have the T Register number zero, as by our rules only cars with known chassis numbers can be given a proper T Register number.

Below is a list licence numbers of the TAs and TBs on record that come into this category - if they were to be published in TTT with a request for owners, should they spot their car, to let me know their chassis number, I can then allocate a T Register number. TC can follow later - there are 172 of them! "

Licence Number (TA)			Licence No (TB)
F TA36H	CKW 56	CJO 617	GKL 62
DL-26-70	LSL 806	BMO 133	FXU 5
EX-66-61	ACX 350	DTF 652	BFR 975
DL-43-36	GJE-676	RX-83-05	PTC 634
BWN 579	BDG 589	OOW 911	APR 460
DYV 256	MG 6304	M-TA-150	ETC 404
DNG 551	GXD 415	BGA 525	CDO 373
DXU 254	LSL 604	ATH 456	GPC 671
EKL 238	VSJ 117	DKT 826	DVE 414
BTC 343	TA 1936	CPX 135	FBT 284
FKL 788	ATH 159	ARP 71	CJB 59
FPE 184	CTC 673	MG 5794	
CTC 681	BSF 777	BSL 208	
MG 4950	GPC 447	FPG 803	
ZH 2850	MG 5429	JV 5049	
MG 4933	EN 7733		

Ignition and Distributors

This article has been provided by Bob Grunau from Canada. Bob tells me that the article will also be appearing in "The Sacred Octagon", the bi-monthly journal of The New England MG T Register Ltd and "Trilium News", the magazine of the Ontario MG T Register (Bob's local Club).

A) COIL:

The stock coil is good to about 6000 engine RPM and therefore suitable for street cars. For high revs and high compression, a "Lucas SPORTS" coil is recommended as it is suitable for revs to 8000 RPM (*but 8000 RPM is not recommended for the stock 'T' engine*). When connecting up the coil ensure that the low tension leads are connected properly. This is, the "**CB**" contact is connected to the "Contact Breaker" connection on the side of the distributor and the "**SW**" contact is connected back to the "Ignition Switch". In the case where the coil has been replaced with a different type, ensure that the "**+**" coil contact is connected to the distributor on positive ground cars (all 'T's + MGA's) and the "**-**" contact is connected to the ignition switch. The car will run if the connections are reversed but maximum performance will be reduced and spark plug wear will be increased.

B) DISTRIBUTORS:

Distributor model interpretations are: Prefix **D** indicates = Distributors. **KY**= die cast body with pressed steel contact breaker base. "**4**"= four cylinder. **A**= automatic advance.

Specific distributor numbers follow, e.g. 40162 etc.

The type of block, compression ratio and camshaft all influence the choice of distributors. Three models of distributors are available for the XPAG - XPEG engines as follows:

- 1) **Model DKY4A** -This model was fitted to the TC and early T Ds and is fixed to the engine block using the TC microadjuster or TD external clamp and 1/8" spacer ring. The measured thickness of both of these types of fixings is 1/4" total. The length from the center line of the drive gear to the bottom of the distributor body is 2-1/2" on the model DKY4A distributor. T h e r e f o r e, using a TC micro - a d j u s t e r or TD clamp and ring fixing results in a center line gear to bottom of fixing of $2-1/2" - 1/4" = 2-1/4"$. This is the portion of the distributor that is inside the block.

Using these distributors for the late TD and TF, a spacer ring of 1/4" thickness must be used or use two 1/8" early TD spacer rings to arrive at 2-1/4" gear to effective distributor bottom. The late TD and TF use a different block and side clamp cotterbolt to clamp the distributor.

2) Model D2A4 -This model was fitted to the late TD's and all TF's and is fixed to the block using a single cotterbolt with a cut out on the side on the rear of the distributor (no external clamp or spacer rings). The length from the center line of the drive gear to the bottom of the distributor body is 2-1/4" and again this is the length of the portion of the distributor that is inside the engine block, same as the TC and early TD.

This distributor cannot be used in the TC or early TD block as no convenient means of fixing the distributor to the block is available without using the TD 1/8" thick external clamp ring. Use of this ring results in gear to effective bottom of distributor height of $2-1/4" - 1/8" = 2-1/8"$ and the gears will not mesh properly.

3) Model DKYH4A -This model was not originally fitted to the TC, TD or TF but is suitable for use in any engine. The length from center line of drive gear to the bottom of the distributor is 2-3/8", therefore, for the TC and early TD use the TD clamp only without the 1/8" Spacer ring. Resultant "in block" length to center line drive gear is then $2-3/8" - 1/8" = 2-1/4"$. For the late TD and TF use the early TD 1/8" spacer ring only and lock the distributor by the cut-out side cotterbolt lock bolt.

Resultant "in block" length to center line gear is still the correct $2-3/8" - 1/8" = 2-1/4"$

Please note if you use the TC micro-adjuster with this distributor the drive gear will be 1/8" too high and will not mesh properly with the cam gear (ie: $2-3/8" - 1/4" = 2-1/8"$ only in block).

C) DISTRIBUTOR CHARACTERISTICS BY MODEL & NUMBER:

1) Model DKY4A

Distributor Number	Full RPM	Advance Degree	Int. RPM	Advance Degree	Low RPM	Advance Degree	No Advance Degree	Recommended Usage
40048B	2600	14-16	2000	13-15	500	1° - 3°	200	Stock TC
40162A	2600	14-16	2000	13-15	1000	8°-10°	200	Stock early TC or TD
40348A	2200	11-13	980	5-7	500	0-2	300	High compression & stock TC, TD or TF cam

2) Model D2A4

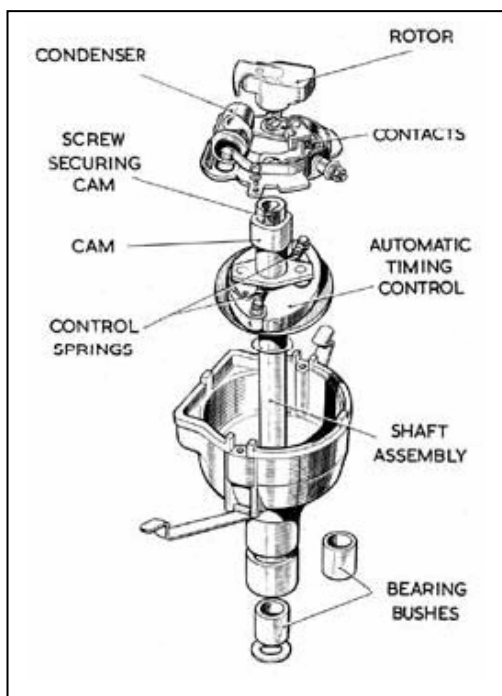
Distributor Number	Full RPM	Advance Degree	Int. RPM	Advance Degree	Low RPM	Advance Degree	No Advance Degree	Recommended Usage
40368	2600	14-16	1150	9°-11°	500	1° - 3°	200	Stock TF
40367	2200	11-13	980	5-7	500	0-2	315	Late TD Or High compression & TF cam
40441A	1500	9-11	900	6-9°	600	1 - 3°	425	AEG122 cam & high comp

3) Model DKYH4A

Distributor Number	Full RPM	Advance Degree	Int. RPM	Advance Degree	Low RPM	Advance Degree	No Advance Degree	Recommended Usage
40115H	1500	9-11	800	5-7	400	0-2	200	AEG122 cam & high comp. For TC, TD, TF with appropriate spacers.

NOTE that the above advances are distributor advances at distributor rpm. As the distributor runs at 1/2 engine speed, the advance and rpm are doubled for crankshaft readings.

D) DISTRIBUTOR CAMS:



The early distributors were fitted with "symmetric" or "asymmetric" cams, these use a point gap setting of 0.010" - 0.012". Dimension across high points of cam lobes is 0.748" and across cam flats is 0.701"

The later "High Lift" cams use a point gap setting of 0.014" 0.016". Dimensions across the high points of cam lobes is 0.748" and across cam flats is 0.643". These dimensions are my own measurements and not factory numbers. The high lift cam was fitted to later distributors to improve ignition system performance and increase contact life.

Cam Angles are as follows:

	Open Period	Closed Period
Symmetric	45° +/- 4°	45° +/- 4°
Asymmetric	41° +/- 4°	49° +/- 4°
High Lift	30° +/- 3°	60° +/- 3°

The above listed distributors are those listed or recommended for the various cars and various stages of tune. Other distributors may operate satisfactorily, but the individual characteristics must be checked and an attempt made to match the recommended characteristics. If you have an "unknown" distributor, I have a complete Lucas listing of the characteristics and would be happy to provide the appropriate numbers. However remember that many changes have been made to distributors over the last 60+ years so carefully check the advance plate instead of relying on the distributor number.

The MG Factory recommended static setting for all distributors as points just opening at TDC (Top Dead Center). However with modern gasolines and higher compression the timing can be advanced to give much better

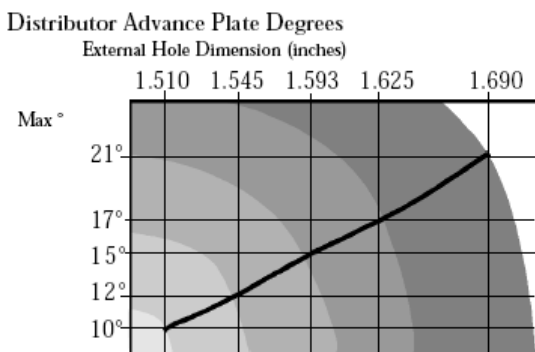
performance. Static settings of 5 or 6 degrees BTDC (Before Top Dead Center) are recommended with a total advance of about 36 to 38 degrees BTDC at approx 3000 to 3500 crankshaft RPM.

E) Distributor Advance Plates:

All T type distributors have a centrifugal advance control plate attached to the vertical shaft. This plate is usually marked with a number indicating the maximum distributor advance allowed by the plate. The advance is controlled by shaft speed and also by a positive maximum stop for the advance weights. The positive stop is a pair of holes drilled in the advance plate. These holes stop the centrifugal advance of the weights, hence control the amount of total distributor advance. Various advance plates, with various holes sizes, were available to give distributor advances for a normal distributor speed range from 10 degrees to 21 degrees. The distributor runs at half engine speed, therefore the distributor advance number has to be doubled to get crankshaft advance measured at the fly-wheel or front pulley. Therefore a TC/TD distributor with number DKY4A - 40048 or 40162 had an advance plate marked 15 (14 to 16 degrees) giving an automatic advance of 28 to 32 degrees on the crankshaft. These advance plates can be modified to give more advance by drilling the stop holes a bit larger. Maximum recommended crankshaft advance using modern fuels is approximate 36 to 38 crankshaft degrees. This can be achieved by statically setting the points opening at 5 or 6 degrees BTDC and an advance plate of 13 degrees. Or a smaller static advance and a slightly higher advance plate setting.

In any case, make sure there is no pinging or pre-ignition anywhere on the rev range. If pinging is occurring, back off the distributor advance setting. Pistons and/or valves will burn out if operated for extended periods under pinging or pre-ignition conditions.

Measuring different distributor advance plates gives the following table. With this information you can modify your advance plate to give the desired distributor advance.



F) Distributor springs:

Lucas made hundreds of different distributors for different cars and specific applications. The T type distributors used two different springs to control the automatic advance. One weak spring was snug on the distributor weights under static conditions. The second spring was much stiffer and was loose and had no tension under idle. At low engine speed, the weak spring controlled the automatic advance in a straight line. As the engine speed increased, the second spring comes into effect and because it was heavier it caused a break in the advance curve and the curve became more horizontal.

Trust this is of interest.

Questions- **Bob Grunau (905) 274-4136**

grunau.garage@sympatico.ca



Photo above is of Bob Grunau in TC8654 EXU at a sandy parking lot driving skill event last October. Says Bob, "See, we do use our cars and get them dirty! TC-8654-EXU was the fastest T-Type, beat out by 0.1 second by an 1800 CC engined MGA".

Bob is probably best known for the manufacture of Alfin type brake drums and oil filter adapters (to take spin off filters) for both the XPAG and XPEG. He also makes TA/B/C stub axle 'pins' which have been race proven and has just made a batch of twin spare wheel carriers for the TA/B/C.

He is spending a couple of days in the UK in April whilst en route to Ireland and I plan to rendezvous with him whilst he is over here.

Ed's Note: Bob's article has now appeared in "The Sacred Octagon".

Cover Photograph – A Remarkable Restoration

Grenville Wilkinson joined the MG Car Club of South Africa in February 1965 and he was one of the seven founder members of the MG Sports Car Register (Southern Africa) (MGSCR SA) in 1967. The MGSCR committee had to consist of not less than 50% T-type owners with a T-type owner as Chairman. 'THE BREED' (*monthly newsletter*) was launched in December 1969 under the editorship of Grenville. He was elected Chairman in 1971 and in 1979 he served as Treasurer.

Grenville's MGTC (#517) was built in March 1946 and is probably the oldest TC in SA. The generator is dated 11/1945 and the regulator 1/1946. It was one of the first few hundred assembled at Abingdon after the war. Grenville bought the car for £250 in 1962 when he was in his matric year at St. Andrews in Grahamstown.

During 1967-68, he did some work on the TC, but as he says "It was not to his satisfaction!" This prompted him to take the car off the road in 1973 with a view to undertaking a complete restoration and so the acquisition of the necessary parts began.

Most unfortunately in 1991, Grenville suffered a severe stroke but with dogged determination, with which T-type owners are blessed, he stuck to his task.

Starting in 2001, and in spite of being handicapped with no use of his right arm, he has done what many T-type owners with two functional arms have never done – he has undertaken full restoration. The car was totally original when all the parts were stripped off the car nearly 30 years previously for meticulous preservation. In addition, on his numerous trips to the UK, Grenville bought many new items – leather seat kit, hub inserts, windscreen surround, new rubbers, D-lamps, wiring loom, etc and all these items were in their original wrapping when the rebuild commenced. The beige upholstery and trim kit he brought back from the UK in 1979 had been carefully stored and is immaculate. #517 is now in virtually the same condition as when he bought it 43 years ago enhanced by a perfect black respray.

His remarkable memory has been invaluable in locating all the components needed. The dashboard with instruments is now complete, the body is on the chassis, the firewall (painted in the correct colour grey) is in place, the petrol tank has been cleaned and the radiator has been re-cored. The wiring loom has been replaced and even has the original brass clip holding it to the front left chassis member inside the engine compartment (TC purists please note!).

Grenville has been helped by fellow MG enthusiasts but particularly by a dear friend, Ben Coetzee, who has been a tower of strength throughout. After a beer and a sandwich at lunchtime the two of them were quickly back to the "girl in the garage" to continue their labour of love.

The long and arduous task successfully accomplished, 25 members of the Register met to admire a remarkable car and Grenville Howard Wilkinson, a truly remarkable man.

The above is based on an article by Joan Parker in 'THE BREED' monthly newsletter, MG Car Club Cape Town September 2005. Additional comments are by Grenville Wilkinson.

Ed's Note: I am grateful to Ros Rowley for sending me the above article and the photograph for the front cover. Grenville is an avid reader of "Totally T-Type", which I send out to him every two months. I have also had the pleasure of corresponding with Ben Coetzee, who is mentioned, and, of course, how could I forget to mention Joan!

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Refurbishing a TC Gearbox Remote

Eric Hayes - Australia

The first time I did this job on the gearbox remote, was when I was helping my friend restore his TC, the same car for which I rebuilt the windscreen wiper. On this car, the wear on the outer shift rod bearing was incredible. The bearing, not only was it devoid of lubrication, but it gave the appearance it had been running in sand! The anti rattle pressure pad was in an equally sad condition. To remedy this I came up with the solution I am about to describe, as I give a second one the same treatment. ***Photo (above right) shows the bearing in question.***



Firstly to remove the shaft. Release the clamp bolt on the lever arm and remove the lever. Now the gear lever must be removed. Undo the large circlip on the top and remove the cover and the spring. I then struck a problem, the lever would not come out. Why? The slots in the ball of the lever are blind, and were cut with an end mill – on later cars the slots were cut through, enabling the lever to be lifted straight out. The pins had been inserted and then the housing riveted over to hold them in place. To remove the pins it was necessary to grind around the head with a burr in a 'Dremel' After two sessions of half an hour I was able to remove one pin, the lever was then able to be removed from the socket, leaving the other pin in situ.

Another case of if the person who was responsible for this design should be made to dismantle and repair his handiwork, it might result in better designs.

The problem of fixing the pin back in place on reassembly was put aside to be dealt with later.

The welsh plug at the gearbox end has to be removed so as to be able to work through from that end.

To bush the shift rod bearing, it will first have to be enlarged so a bush can be fitted. To make sure that it was drilled in line with the front bearing, I built up an extended drill that could be assembled in the housing. This comprised of a 18 1/2" length of 1/2" diam. BMS – Bright Mild Steel, one

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end drilled 3/8" diam. in a good 2 ". This is to take the turned down shank of a 9/16" diam. drill. The drill is held in place by means of a collar, say 1" diam x 3/4" long, drilled and tapped radially 1/4" BSW, for an Allen headed grub screw. This screw goes through a hole in the 1/2" rod and clamps the drill in place. To help stop the rotation of the drill in relation to the rod a flat is filed on the drill shank to coincide. **Photo on the right shows a close up of the parts.**



The shanks of HSS drills can be turned down quite easily by holding the drill in a home made collet, of say a 2" length of 5/8" diam. BMS, drilling with the drill in question and then splitting it lengthways with a hacksaw. If clamped in the lathe chuck with the split between two jaws it will clamp the drill. A slow speed is necessary and a tungsten tipped tool would be a help. Metric sizes can be substituted if desired, but the shaft remains 1/2" diam.



As shown in the **photo on the left** the gearbox extension was bolted to a piece of plywood and this then held in the vice. Otherwise, it is an awkward thing to clamp or hold securely. I turned the driven end of the drill extension

to 3/8," as I have a 3/8" capacity drill. The drill extension is fed from the front end through the front bearing and then the collar and drill are assembled to it and the grub screw tightened firmly.

If borrowing or hiring a drill, do not get one too large otherwise there is the possibility of the drill bit remaining stationary and you turning around. Select the slowest speed and lubricate the drill bit, also a spot of oil at the front bearing of the extension, take it easy and do not force the cutting action. Now the housing is ready for the bush, or bushes.

As the bushes are thin walled they are to be held into the extension with 'Loctite'. To make them a press fit, the wall would have to be thicker, making the O.D. larger. If this is done the hole is larger, then there is the risk of splitting the casting, plus reducing the inside diam. of the bush. In fact there will be no compression in the bush, they can be made a nice running fit on the shaft.

A point to check is that the wear on the shift rod is not too great. If more than .003" to .005" a new shaft is in order.

The hole you have just drilled will have to be accurately measured so the bush can be made with the correct clearance, .002" to .003" for 'Loctite' 601. On the first one I did, I made one bush, but thinking later I realised there was no lubricant reservoir, so with this one I opted for two bushes of such a length that there was an 1/8" gap between the ends. As the anti rattle pressure pad is 5/16" in diam a scallop will need to be filed in the inner end of each bush (**see photo to the right**).



The shoulder on the outer end acts as a stop when inserting, making up for the bearing length lost by leaving the gap in the centre.



If making only the one bush, the hole for the pressure pad will have to be drilled before insertion, as if drilling after is attempted the drill will move sideways and damage the thread for the plug.

On assembly, if everything has gone to plan the shaft will

slide easily through the two bearings (**it does in the photo above!**)

Now to tackle the gear lever swivel pin!

There was no, or very little, casting left in the vicinity of the hole to re rivet over the head of the original pin again. One solution would be to cover the head of the pin with an epoxy and hope it adheres. It probably would but it is hardly an engineering solution. After all, it has to last until the next century, at least! The idea was to make a pin that can be screwed in with a larger head incorporating a screw driver slot to enable it to be tightened.

The pin was 5mm in diam., the hole a few thou larger. To make it easy, what thread had this size as a tapping size? There were several, 1/4" B.S.W., considered too coarse, 0BA and 7/32" by 40 T.P.I. Model Engineers

Thread. I settled on 0BA, tapped

in about 3/8" and made a screw-in pin with a 5/16" diam. head. A hexagon head would have been ideal but I did not have any of a suitable size.



Photo shows the old and new pin. Well, another part of a TC lives again!

Ed's note: To complete Eric's article I thought that I would reproduce (facing page) the relevant Parts List page. The key to Plate P is below.

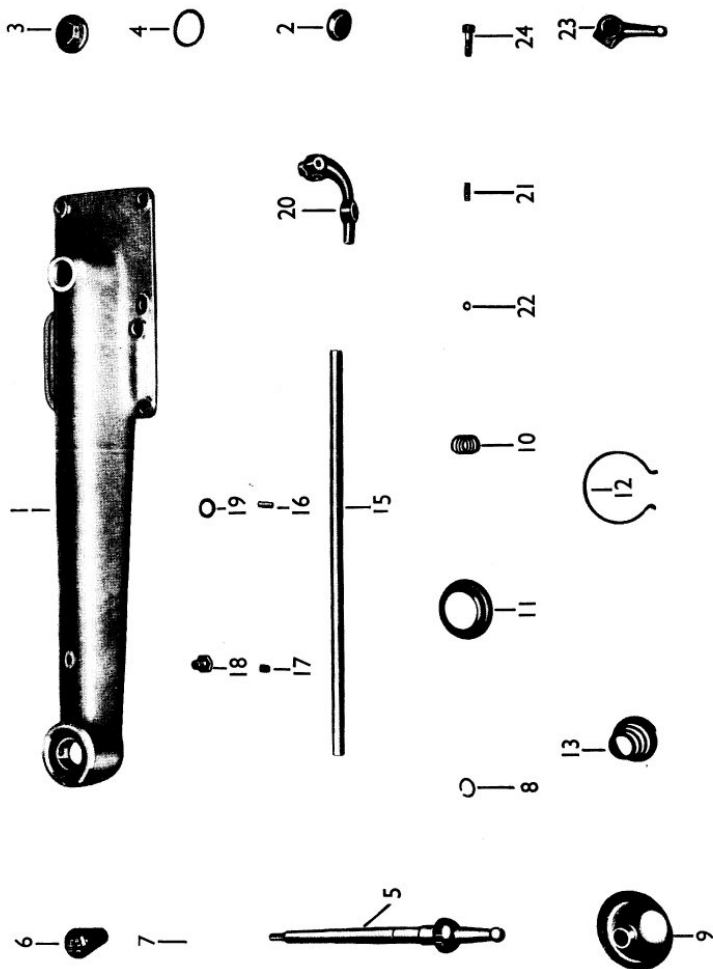
1 Housing assembly for remote control	13 Anti-rattle spring for change speed lever
2 Core plug for housing	15 Change speed operating shaft
3 G'box oil filler plug (with baffle)	16 Anti-rattle spring for operating shaft
4 Washer for filler plug	17 Plunger for operating shaft
5 Change speed lever	18 Plug for operating shaft
6 Knob for change speed lever	19 Washer for operating shaft
7 Locknut for change speed lever	20 Actuating shaft lever
8 Circlip for change speed lever	21 Anti-rattle spring for lever
9 Cover for change speed lever fulcrum (outer)	22 Ball for lever
10 Spring for cover	23 Selector lever
11 Cover for change speed lever (inner)	24 Bolt for actuating shaft and selector levers
12 Circlip for cover	

THE MIDGET (SERIES "TC")

GEARBOX REMOTE CONTROL DETAILS

SERVICE PARTS LIST

PLATE P



Ed's Note: Although the Parts List numbers are different in the TA/TB Parts List, having compared the two Parts List Plates, I believe that the set up is essentially the same.... but I stand to be corrected!

Thick heads/thin heads

In his article "Head Gasket Failures", p.32 of the January 2006 Totally T-Type, John Seim tells us that "The 1250 or 1500 cylinder heads started out with a thickness of 3.022" (76.75mm). Unfortunately, that is not entirely correct and as his helpful article deals with the possible problems arising from excessive machining it is important to be aware of the correct thickness of the standard head for your car when it left the Factory .We can probably count on the fingers of one hand the number of T-Types still retaining their original engine in an un-restored condition but we have to start somewhere.

The 1250 engines as fitted to the TB, TC and TD were, in the main, fitted with heads having a standard thickness of 76.75mm, giving a compression ratio (c/r) of 7.25:1. The first exception was the TD Mark II or TD/C model which, up to November 1952, had a standard head thickness of 74.37mm, giving a c/r of 8.6:1. From 1 December 52, the compression ratio was reduced to 8.1: 1, head thickness 75.16mm. Roger Wilson, who has researched XPAG/XPEG engine changes in great detail, tells me that this change took place from engine number XPAG/ TD3/ 22978. Strangely, this was shortly after the modified cylinder head, having round water hole passages, was introduced at engine number XPAG/TD2/22735, when the opportunity might have been taken to make all the head changes in one go. The other notable exception is the 1250 TF, which basically adopted the Mark II engine specification from the first day of production, engine number XPAG/TF/30301, and therefore had the 75.16mm head, c/r 8.1:1. As stated, the TF 1500 XPEG heads were indeed 76.75mm thick in standard form, giving a c/r of 8.3:1.

It follows, therefore, that care should be taken to establish what head is now fitted to your engine when seeking to calculate what c/r you are running on and therefore how much metal, if any, is still available for removal. The cylinder head casting numbers were as follows:

**TB, TC and TD Mark II to XPAG/TD2/17028
and TD to XPAG/TD2/22734**

casting number - 22952

**TD Mark II from XPAG/TD3/17029
and TD from XPAG/TD3/22735**

casting number - 168422

TF 1250

casting number - 168422

TF 1500

casting number- AEF 118

These numbers may be found on the upper face of the front right hand side of the head.

John Seim rightly points out that the great majority of T-Type engines will have been rebuilt many times by now. T Register Car History records show

that even by the 1970s, some engines had been rebuilt at least three times, so the chances are these may have been subject to further head machining since then. Unless specifically instructed not to do so, some engine reconditioners will automatically machine the head underside face and possibly even the block top face, simply to true them up. So how much can be taken off the head before the point of no return is reached? The 1954 edition of "Power Costs Money", the Factory Special Tuning booklet, recommended that the head thickness after any machining of the face should not be less than 73.57mm to give a c/r of 9.3:1 for the 1250 engines and 10.7:1 for the 1500. Information giving the modifications required for each tuning stage may be found in Appendix V of John Thornley's book "Maintaining The Breed".

We should remember that the 1954 tuning recommendations were issued when petrol in the UK was around 80 octane or worse. Today's fuel is much higher rated and it may just be possible to use a head that has had an extra 0.50mm removed, resulting in a minimum head thickness of say 73.0mm. I must stress that I have no experience of testing this theory and as always, the advice of machinists experienced in our type of engine should be sought before work commences. Beyond this point head distortion and "running-on" caused by hot spots could become real problems.

Roger Wilson advises that when replacing a blown head gasket it is not always necessary to have the head (or the block) milled. However it is advisable to have the face of the head examined for any scorch grooves and checked for flatness. If problems are found, it is better to have the face surface ground, as this removes less metal. Some machine shops may say that milling is just as good or even better; it could be that milling is all the shop can offer. However because of its size, block problems usually have to be corrected by milling, but only the absolute minimum necessary should be machined off.

John Seim tells us that all is not lost if you find too much metal has already been inadvertently removed. A new specially made thicker gasket is the obvious answer but a cheaper option might be to fit two standard head gaskets to make up for the loss of metal. Gaskets are approximately 1.14mm thick (compressed) so this could do the trick. As a last resort, if you cannot find an XPAG head in usable condition, you could consider an XPAW head from the Wolseley 4/44. Identical to the TD2 head it had a standard thickness of 76.75mm, c/r 7.25:1. Finally, if you are feeling really rich, you could invest in a new Laystall Lucas Alloy cylinder head that I believe is available with a variety of compression ratios from advertisers in this journal.

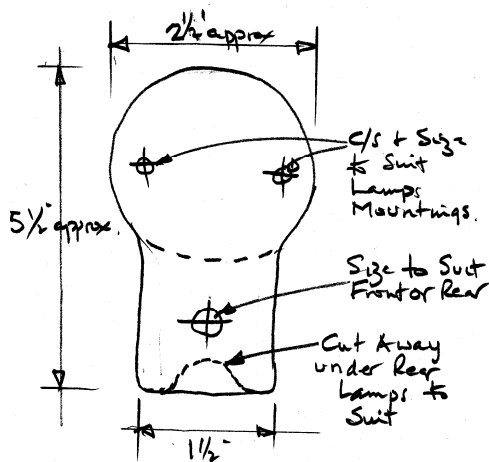
Roy Miller (T Register Historian) with help from Roger Wilson.

A 'CLEARER' SENSE OF DIRECTION !!

Before the real experts read on - be warned! - this is how a relatively simple amateur overcame the fear of being shunted from the rear in a TD. My TD MK2 was either originally or subsequently restored with the infamous flashing side lights as direction indicators. Whether he was right or not, about 4 years ago my MOT man said he could no longer pass this, but, I too was not happy with the arrangement having had a few blasts of other peoples' horn from time to time and finding it difficult in bad weather to stick my hand through the door flap.

I did not want to spend a fortune or start drilling holes in the bodywork so resorted to my usual style of a fairly reliable but simple solution. I also found that the Electrical Diagram on Page N23 (*of the TD/TF Workshop Manual*) with a Control Box and double filament bulbs slightly tortuous to try and unscramble easily. Yes I know there are ideas now on how to fix an amber light in your 'red dot' sidelights, but I still don't think this is safe enough. So, a visit to the local Motorist Discount store soon furnished me with a pack of 4 round amber lights marketed for trailers. Next problem..... how to fix them simply but neatly - I've seen too many bodge ups on boats to realise that you can easily detract from the original appearance quite easily. A quick browse round even my garage revealed some sheet alloy about 2mm thick and easy to work with.

Next draw the circular profile of each lamp on to the aluminium, and, add on the required flange area for fixing the front lamps under the bumper bolt and rear lamps under the rear base. The front backplate mounting will be vertical and the rear needs bending vertical once the plate is fixed under the lamp mounting. A few small holes in the aluminium and the physical part is soon complete with smart new lamps front and rear. A typical sketch is shown on the right.



The cut away in the rear backplate is to seat the plate around the wiring loom to give additional stability. Yes, shaped like this the top lampbolt fixing alone has proved satisfactory. The front plate is simply nipped up under the bumper bolt.

Earth return seems to be satisfactory both front and rear.

Study of the Control Box on the Direction Indicator Relay Unit on the electrical

diagram revealed that terminal 22 apparently connected to the stop lamp switch which I assumed was to give a live feed to the stop element of the bulb when the flasher was not working. A live feed to the Relay Box also came from the Flasher Unit into Terminal 23 to activate and presumably override the stop lamp circuit when the flasher is actuated. Rather than get involved in fiddling with the relay wiring I chose to give the stop lamp switch a separate live feed and so avoid complications in activating the new direction indicator lamps and this seems to be satisfactory. I've since learnt that I could have isolated the flasher circuit instead and done away with the relay. In respect of the lamps I managed to work out which lead fed the appropriate front and rear lamp filaments, isolated these and took an extended lead to the new lamps. In the case of the rear lamps I took a new lead from the stop



lamp switch direct to the rear stop lamp filaments in view of my uncertainty over the original live feed through the relay. With a bit of binding and protection of the minor wiring changes to the loom under and through the wings into each of the original lamps, the job was complete and has worked well for 4 years.

The combined switch and warning mounted under the edge of the dashboard has been retained and apart from the occasional blowing of 15 watt festoon type bulbs, which one is soon aware of, as the warning lamp doubles its flashing rate, everything seems to work fine and appears so far to have proved effective in making my turning intentions much clearer and my MOT man fully satisfied. I also have more peace of mind in busy or urban traffic.

Graham Brown

THE NIGHT I RACED STEVE MCQUEEN ON SUNSET BLVD.

by Phil May

It was a sultry Southern California night back in April of 1963. Probably the dreaded Santa Ana winds— I can't remember. What I can remember is that my wife Betsy and I were living in a shoe box apartment over two garages in back of a house on 18th St. in Santa Monica, Calif. Half a block south of Wilshire. We had little money. We—well, one of us— were 8+ months pregnant with our first child. We had no air conditioning. We were hot! I suggested a ride. Not in our '55 Hillman Husky station wagon, but in our restored M.G. TC— named "Tissy" — which was lurking, top down, in the garage below our wee home. "We'll stop at a Foster's Freeze for some ice cream," I said, trying to drum up some enthusiasm from a girl who, right at that moment, just wanted to get a watermelon out of her stomach. The ice cream did get some positive interest.

I'd begun the restoration of the TC in 1960 while in college and finished in time for us to honeymoon in it to Laguna Beach in 1962. Made the car up out of two— a basket case with a Ford V8-60 and a wreck with good XPAG driveline, almost-new "biscuit" leather upholstery, new tan top and tonneau and other goodies. It was a decent, amateur, bare chassis renovation. Did everything myself but paint the car (done off the chassis) and bore the engine. Bought a lot of parts over on Venice Blvd. when Moss Motors was there before Goleta and was still Al's. It was the answer to a dream begun first by a TC owned by a gorgeous chemistry teacher in my school and furthered by Don Stanford's THE RED CAR when I was just starting college.

Betsy eased slowly down the outside wooden stairs like a human glacier. I fired up Tissy and pulled her out into the alley. Betsy shoe-horned herself in, dropped with a soft, heavy thud and we were off. Up Wilshire to the entrance to UCLA (University of California at Los Angeles) in Westwood, then up through the campus to Sunset Blvd. A smooth, curvy, correctly-cambered road that would lead us, after some nice fast turns, down into Hollywood. Traffic on Sunset was light and the ride was all we hoped it would be. Breezy and cool — in the physical sense. It got a lot cooler — idiom-wise — about a half hour later.

On the outskirts of Hollywood, we stopped somewhere for ice cream. I remember that. Then, suitably refreshed inside and out, we continued on Sunset, approaching Hollywood's inskirts— civilization and some traffic. Stopped in the right hand lane at a red light, I suddenly heard lovely engine exhaust sounds behind us. I twisted to my left to look back and see what car was making the noise. The engine revved to a scream again and again. The light changed. The first thing I saw was a gleaming, black, '63 split-window Corvette coupe moving ahead slowly in the lane to our left. Now I knew this was not Chevrolet music I was hearing. It had a lot of treble and not much bass. The two guys in the Corvette actually looked a bit scared. The passenger was turned in his seat looking out the back and the driver had his eyes glued to the rear-view mirror.

The coupe eased past us and made a signal to change into our lane. The engine scream continued. What had been behind the 'Vette— its nose literally inches away— was a British Racing Green Jaguar XK-SS. Steve McQueen was driving and grinning as he attempted to goad the 'Vette driver into something. I don't really know what, because while the traffic was light, it was there. A serious drag race wasn't in the cards. The split-window wasn't buying any of it and after pulling in front of me, the driver made a signal to turn off Sunset. And did at the next street.

McQueen, no longer grinning, was now alongside "Tissy" — also painted Jag BRG. He was steering on the right, of course, and as he came even, his eyes dropped down to Betsy's very baby-bulbous belly, made more apparent by the drop in the TC's doors. Then he grinned again, looked up at me, raised his eyebrows and pointed ahead. As in "wanna go?" Yeah, right. A 1250 cc XPAG against a barely street-legal D-Type Jag? But what the hell. I shifted down and floored it. There was no traffic ahead for a couple of blocks as we motivated along. McQueen was polite and stayed with us instead of blowing us away. He was laughing. I was laughing. Even Betsy was grinning.

Now you have to understand that even though half of what was under that long hood were legs and feet, Tissy had a great sound herself at about 2500 to 3000 rpm in any gear when your foot was in it. Sounded much more wanton than she really was. So there we were— me and my new racing buddy Steve, making melodious motor music along Sunset Blvd. in Hollywood. A light stopped us again after about three long blocks. Whole thing lasted 30 seconds at most. Seemed like hours.

McQueen must have had his left signal on, because when the light changed he gave us his best, straight-across, "Wanted Dead or Alive" grin, waved his hand, screeched left and disappeared. All he left behind was the Jaguar's scream caroming off the walls of buildings. We drove home slowly talking about what had probably been a completely forgettable night for Steve McQueen, but an unforgettable one for us. We both liked McQueen as an actor. I loved D-Types. Double your pleasure, double your fun.

Months later we went down to the sports car races at Del Mar, near San Diego. We had pit passes. Who should pull up in the paddock but Steve McQueen in a BRG Land Rover, towing what I recall as a BRG Lotus or Cooper single-seat Formula car on a trailer. After a bit we wandered over. McQueens' wife Neile Adams was practicing dance steps— leaping gracefully into the air. McQueen was talking to Dan Blocker and Pernell Roberts (Hoss and Adam in "Bonanza"). Betsy and I walked up and waited at a little distance. McQueen glanced at us, did a take — then stopped talking. He kind of cocked his head and narrowed one eye, looking first at Betsy, then at me. Blocker and Roberts were looking at us too. Then his face broke into a grin. "What kind of kid did you have?" he said. We told him about our daughter Darcy, born June 10th. "Great!" he said. "Congratulations." We shook hands. Betsy and I moved on after wishing him good luck in the races. Neile kept jumping.

That's it. How I raced Steve McQueen in an XK-SS Jag in a dead heat down Sunset Blvd. I guess it wasn't all that forgettable for him after all. I sold "Tissy" a month later and still don't remember why, but— with apologies to Frost — I had other cars to keep and miles to go before I sleep. Two MG PAs, two Morgans, a Big Healey BN2, an AC Ace, three more TCs, several Woodies (wooden-bodied shooting brakes in England) and other automotive toys. A lot of years later, "Tissy II" — TC number five — now sits in this much older man's garage in Williamsburg, Virginia.

On a lark one day last year I Googled "Tissy's" car number. Lo and behold I got hits. It seems my car had made it back to England somehow. A fellow named Mossop had it advertised a year or two earlier. I tracked him down and found his widow, Victoria. She was most helpful and had a lovely voice. She promised to find out where "Tissy" had gone when her husband sold her. After getting email from John James I got Trevor Minett's name and email address. "Tissy" has now been given the more masculine name of "Trevor's Chariot". I was pleased to be able to write him my history of the car and we correspond via email every few months.

Oh, I could also tell you how "Tissy" and I nearly flattened a pedestrian Phil Hill one morning in Santa Monica. It's a story about a paragraph long, but that really happened too. Maybe some other time!

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NOTES ON FITTING TAPER-ROLLER BEARINGS

by Roger Furneaux TA/TB/TC Technical Representative

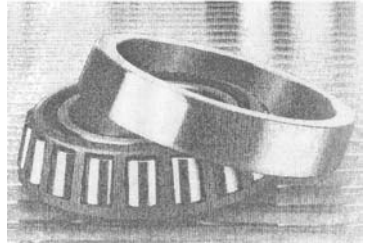
Roger.46TC@virgin.net

INTRODUCTION

The whole subject of stub axle related problems is a thorny one, to say the least! I have made many references to stub axle breakage and bearing problems over the years in Newsletters and **Safety Fast!** (June '96 was the main article, and since many of you either did not see it, or have forgotten it, we could reprint it in a future TTT, maybe for the tenth anniversary next June).

Many years ago – “many” meaning more than 30, some of us have had our T-Types for a mighty long time! – somebody came up with the idea of replacing the rather fragile ball bearings in the front hubs with taper rollers. In case any of you are not familiar with these, they have small tapered rollers in place of spherical balls, and run between an inner and outer race, which are ground with the appropriate taper to suit the rollers.

The result is a bearing which can tolerate far greater loads than ball bearings: not only is there a greater load bearing area for each roller, compared to balls which only have point-contact, but there are more of them. As will be obvious from the photo opposite, a single-row taper roller can only cope with an axial load in one direction, but, of course, with two opposing each other, they can accommodate the combined axial and radial loads.



However, due to the construction, with the outer race being removable, they need careful setting up so that when assembled there is absolutely no clearance between rollers and races (or “zero back-lash” in technical parlance). Not only that, there should also be some “pre-load”, i.e. the inner and outer races need to be set to be slightly closer together than the zero clearance situation, which gives a very small resistance to turning, or torque, which has to be measured accurately.

Now, back in the “good old days” nobody bothered about doing things scientifically, and because the original bearing spacers are too short for the taper rollers, due to them having an offset between the races, we just left them out...ignorance is bliss, goes the old proverb! Much discussion has taken place over the years as to the importance of the spacers, but the majority opinion now is that they are **essential** because when the stub-axle nuts are tightened up, the stubs are slightly stretched and the spacers correspondingly squashed. This results in an assembly which is much more rigid than a stub-axle alone would be (think pre-stressed concrete beams, as used in most motorway bridges).

In the case of ball bearings, the spacers have to be precisely the same length as the distance between the bearing shoulders inside the hub. Whenever a bearing seizes up (as it must invariably do under load when it is worn out) it will either spin its races in the hub, or on the stub-axle (or both!) and wear these surfaces away (bearing steel is very hard). The shoulders and the spacers also get worn, but not always by the same amount, resulting in either a spacer which is too short (so that when the bearings are replaced and the nut tightened up, everything locks solid because the inner races are being squeezed together) or too long (resulting in the hub being able to move axially on the bearings).

The taper roller bearings which we are going to use, have an offset between inner and outer races of 1.25mm, so that a spacer about 2.5mm longer is required. I say "about" because as hubs and spacers vary (see above) this is the starting point: to make life easier we will use shims to make up the extra and also to set the pre-load torque. Without spacers in place (and in common with many others, I ran my TC for several years like this...) the procedure was to do up the nuts to 35lbsf. ft. then back them off by 1.5 thou (this was allegedly what VW recommended) and check that the hubs could spin -very unscientific!

STUB AXLES

The first and most important thing to do before installing any new bearings in the front hubs, ball or taper roller, is to have the stub axles crack-tested. The best method is by industrial X-ray (medical sets are not powerful enough -I tried!) But not only is this facility uncommon, it will probably be expensive. The next method is Magnafluxing, which consists of coating the component in a fluid containing magnetic particles. It is then placed in a strong magnetic field which aligns all the particles, however any cracks show up as a disturbance in the pattern. Lastly comes die penetration, which can be done at home with a simple two aerosol kit. After thorough degreasing, the penetrating purple die is sprayed on, left for a few minutes then washed off with water. Drying is followed by the developer spray, a white powder which adheres to the surface. Any cracks are shown up by die which bleeds out into this coating during ten minutes or so.

The two aerosols of Rocol Flawfinder die & developer cost about £25 from Farnell or RS Components, so are a tad too expensive to test just one pair of stub axles, but of course you can check anything else liable to break, such as steering drop-arms or con rods. Magnafluxing is used by crankshaft regrinders prior to letting loose their very expensive grinding wheels on your 50+ year old crank. Look in Yellow Pages under Engine Rebuilders. They will probably relieve you of £10 cash for 10minutes (or less!) work, but it is money well spent.

Having assured yourself of the integrity of your stub axles, take a good close look at them, and you will be surprised to see lots of nicks, dents and scratches! None of which should be there, but not quite as terminal as penetrating cracks. Set to work with a fine Swiss file smoothing out these defects, which were caused by generations of previous ham-fisted owners

trying to remove the inner bearing with screwdrivers, tyre levers, cold chisels or whatever. Unless you are unlucky enough to have early type stub axles which have a square step, the root of the stub will have a nicely rounded profile, and this is where most of the damage occurs and cracks start to form. So the next stage is to impart a nice surface polish to this area and the adjacent inner bearing journal. To do this, hold the stub axle in a lathe chuck by the outer bearing journal, turn on and use strips of progressively finer emery cloth, starting with a medium. It is sold in rolls about 1" wide, and very handy stuff it is too. Be very careful not to catch your fingers on the whirling axle: this is one of the hairier DIY servicing jobs, but if you don't fancy trying it, or don't have access to a lathe, just hold the axle in a vice, using soft jaws and with the stub sticking up. This time your 'elbow grease' will be imparting movement to the emery strip: it should not take more than half an hour for both.

Next examine the LH & RH threads on the ends, they are invariably damaged, and make sure the nuts screw on easily. The ring spacers which go over the rounded root of the later axles, are also often damaged (see above) and since the lip-seals run on them, file out any nicks and polish them up. The hubs themselves are probably as old as you are, and a bit past their sell-by date! Examine the studs; are they loose, do the nuts screw on easily? Check the wheel splines; do they have flat tops, or are they worn so much that they come to a sharp peak? Do the wheel spinners go on easily, or are the hub threads damaged? Hubs have a hole to gain access to the bearing nut split pin: originally they were threaded for a small slotted plug, but new hubs have a plain hole.

Lastly, how easy was it to remove the old bearings? If at any time the bearings have locked up under cornering forces, then the chances are that the inner or outer races have spun. Now, being made of very hard steel, this will have resulted in the softer steel of either the stub or the hub being removed. So the very first thing you should have done, even before spending time and money on crack testing, was to take some new bearings and checked them for a good tight press fit on the stubs and in the hubs. If they are loose, then reach for the cheque book....Tricks commonly used include Loctite (works surprisingly well with only slightly loose bearings) and peppering the journals with lots of little centre-punch holes (I have also seen this used on stub axles, but it is impossible for the outer hub bearing). The actual surface area gripping the bearing is very small, and they soon get loose again.

For the record, the bearing types are:

Inner bearing original LJ25 or 6205, taper roller replacement 30205

Outer " " MJ20 or 6304, " " " 30304

INSTALLING THE TAPER ROLLERS

New bearings usually come with some sort of protective oil, grease or varnish, so give them a good soak in degreasing solvent, dry them off and put on a few drops of very thin oil (such as Singer sewing machine oil). Press the outer races into the hub (don't get them mixed up!), preferably using a hydraulic

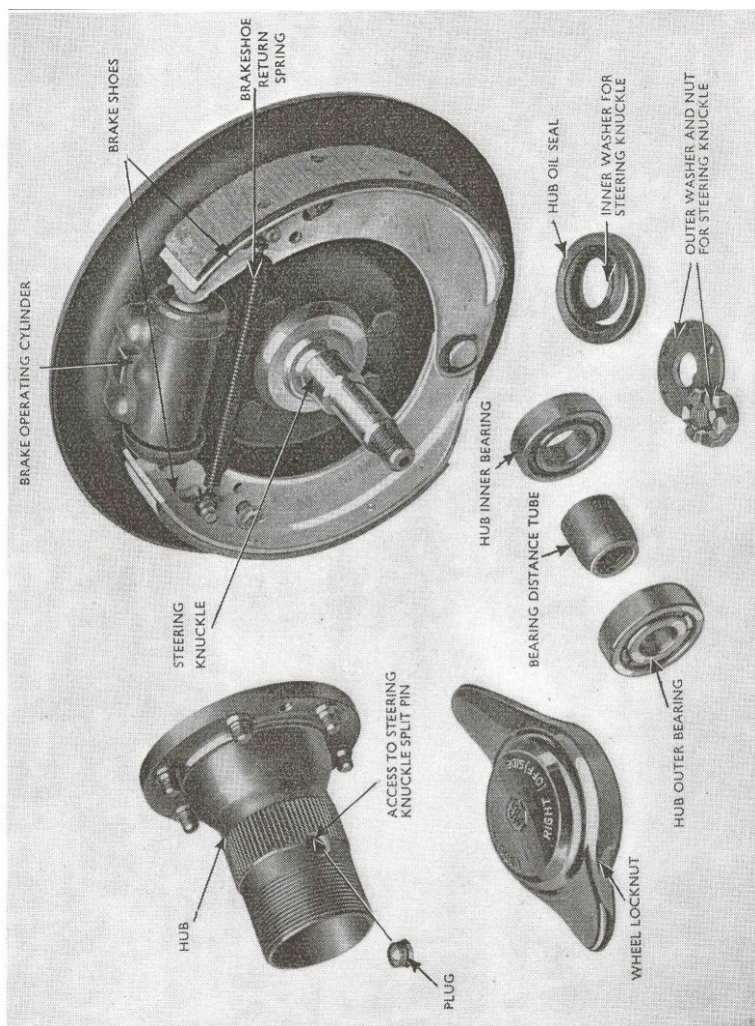
press, although a mandrel press or even a strong pillar drill can do the job. If you have none of these, a strong bench vice will do at a pinch. Way down at the bottom of the list is brute force, i.e. a heavy rubber mallet, or your wheel spinner hide mallet. Whatever method you chose, search for a selection of large sockets to act as spacers, especially for the outer bearing which is down inside the hub, to push against the bearing races. Most makes of taper rollers have an offset of 1.25mm between the inner & outer races, thus a total of 2.5mm needs to be added to the original spacer, using shims. The kits I supply have a 2mm thick "support washer" plus 0.1, 0.2 & 0.3mm shim washers to a total of 2.7mm which should more than suffice in most cases. It is better to determine the shims required off the car. Place a suitable socket or other spacer on the bed of the press, followed by the inner race of the 30205, the original hub spacer (smaller end up), and 2.7mm of shims. Get all these lined up (a short length of $\frac{3}{4}$ " [19mm] dowel helps) then place the hub over them all followed by the inner race of the 30304.

Now place more sockets or spacers over it, making sure the first one does not foul the rollers, so they come over the top of the hub. Clamp down on the whole assembly, and check for free rotation of the hub. If it is locked up solid, either the sockets you used are too large, or you need more shims! With a hydraulic press, you can mount a dial gauge by its magnetic base and measure the endfloat, but this is more difficult with a mandrel press or a pillar drill. Next, simply lift off the hub, remove a 0.1mm shim, and repeat the process, going down 0.1mm each time. You will very quickly find the best combination: too few shims and the hub locks up, too many and there will be end float. When it is just right, the end float is zero and the torque to rotate the hub should be 5-7 lbsf. inches. If you want to be really pedantic and measure this, bolt a short strip of metal to one of the hub studs so that it sticks out radially. Now measure exactly 6 inches from the centre line of the hub out along your strip and cut a small notch. Hook a fisherman's type spring scale into the notch, and when you give a pull of 1lb. to just start the hub moving the torque will be 6lbsf. ins. The thinnest shim is 0.1mm or about 0.004"(4 'thou) and if you feel that a finer adjustment is required, you will have to remove a 'thou or two from the spacer. By using fine emery, or 100 grit wet & dry paper (use some light oil, not water) placed on a flat surface, a few minutes should see the job done. Keep moving the spacer round, the trick is to remove metal evenly (a micrometer or good vernier can be used to check).

Now pack the inner bearing with grease (I always use a handy forefinger...), place it into its outer race, and press in the lip-seal. Spread some more grease around this, put the small spacer ring on the stub axle, and then the hub. Assembly is easier off the car, with the stub sticking up, but can just be done in situ. Feed the centre spacer plus the previously selected shims on, followed by the outer bearing, greased as before, the "holey" washer and the nut. Note that the "holey washer should be dished (although many have become a little flattened over the years); install so that the outer edges clear the bearing. Incidentally, nobody has ever come up with a good reason for the holes (and

they are much easier to make without!), so I am open to suggestions! Torque the nut up to 45lbsf. ft. and check if the hub turns freely and also that the split pin hole (which is horizontal) roughly lines up with slots in the nut. Set the torque wrench to 85 lbs. ft. and tighten up to the next split pin slot, at which point the torque should be close to 85. Do NOT exceed this with old stub axles: if the slots do not line up, remove some material from the back of the nut in the same manner as the spacer. If you wish, use the metal strip and spring gauge as above to re-check the bearing torque.

Reproduced below is a photo of the original set up, taken from 'Blower', which utilised the ball bearings as standard equipment.



Kimber House and the Club's Office Requirements

Report and Recommendation of the Council Sub Committee

Reference was made on page 8 to the formation of a Working Party, being a Sub-Committee of MGCC Council, which was tasked with carrying out the examination and assessment of all available Club Office options and assessing the Club's office accommodation needs. The timescale was to present all options by the Council meeting in October, 2006 with an interim report by March 2006. The interim report has now been completed and the Working Party's summary is reproduced below. The full interim report is too long to reproduce in TTT, but it can be found on the Register's website www.tregister.org by going to 'T Register News', finding the appropriate heading and clicking on the link. Following publication of the report to Council members, MGCC Chairman, Peter Best wrote to MGCC Council members to give some background to the reference in the Sub-Committee's Report to the financial position of the MGCC. This letter is reproduced after the Summary Report. Finally, after Peter's letter, I have jotted down a few salient points from the Working Party's report which, hopefully, readers will find helpful.

Summary Report

Introduction

"The Council Subcommittee was formed in November 2005 following the Council meeting of the MG Car Club (the "Club") on 15th October 2005. Its terms of reference, membership and *modus operandi* have already been published on the Club website and magazine and are included here under Appendix A.

We have invited views from the membership and have received some, which we have carefully considered. However, the feedback to date has been limited, and we have therefore had to rely largely upon our own opinions.

We had intended that this report would give Council the main criteria that we believe a new Club office should meet, the options available to meet them and the sums available for expenditure on new premises. We also planned to provide our final report to Council at their meeting in October 2006. In the event, as you will see from this report, things developed rather differently, and we now have a proposal to make to Council for immediate expenditure on a much smaller scale than expected that we believe will satisfy the Club's accommodation needs for some years to come.

Key Conclusions

Very early in the Council Subcommittee's deliberations, it became apparent that the current financial health of the Club was considerably worse than expected, partly, and maybe temporarily, because of the contract struck with Octane Media for the publication of Safety Fast! The Executive Committee of the Club, facing a significant deficit for 2006, have been giving considerable thought as to how the Club can quickly be brought back into the black, and their

solutions were not in place at the time we were considering future accommodation options.

It is our view, therefore, that no major expenditure on new accommodation should be undertaken at this time, nor until the ongoing profitability of the Club is restored. Most of the options summarised in this report, therefore, could not be pursued for some time.

However, there are available two mutually exclusive options that do not make heavy demands on the Club's reserves. One of these, if pursued, has to be started immediately, and therefore Council are asked to consider and decide upon these two options at their meeting on the 18th March 2006.

The two options are:

1. **To commence work on the planning consent obtained in July 2001**, which permitted an extension and a garage block at the existing Kimber House. The planning permission will expire in July 2006. It would be possible to start on the garage block/storage facilities area and preserve the total planning approval without committing the Club to the larger expenditure of the full extension of the main building at this time.
2. **To sell the existing freehold development interest in Kimber House** and to use the proceeds, net of tax, to buy freehold premises elsewhere.

Both of these options are explored fully elsewhere in this report.

The Council sub committee recommends to Council that the first of these options be pursued immediately."

TEXT OF A LETTER DATED 10th FEBRUARY 2006 FROM PETER BEST, CHAIRMAN, MGCC TO MGCC COUNCIL MEMBERS

"The report of the Council Sub-Committee appointed by resolution of Council on 15th October 2005, has now been published for consideration by Council and, if acceptable, awaits approval on 18th March.

In its report, the Council Sub-Committee refers to the financial constraints of the Club. These may have come as a surprise given the forecasts of continued budget surpluses set out in the report from the Directors in August 2005 in support of the proposal for a new Kimber House.

I will be giving a full account of these matters in my Chairman's report at the March Council Meeting, but suffice it to say that the initial 2006 Budget proposals put forward to the Board by the Chief Executive were for a likely deficit of circa £41,000. This follows a poor 2005 (where at the time of writing final figures are awaited) which was influenced by a number of different non-recurring items.

Following an intensive investigation into all the components of the 2006

Budget, we have concluded that, among others, the main reason was that the net costs to the Club of the new arrangements for the production of Safety Fast! with MG Enthusiast as from November last year were considerably more expensive than the previous in house production, whilst the anticipated income sources that might mitigate these costs are at present uncertain, relying as they do on a third party publisher. As the figures for this contract were not contained in the Directors' August projections, the true extent of the potential problem has only recently become apparent. Because of the nature of the deal with Octane Media Ltd relying as it does on the generation of incremental new members recruited via the magazine and agreed profit shares, the success of the venture cannot be judged for some time yet and a conservative approach must therefore be taken.

I very much regret this state of affairs which the present board are now addressing, and which, in the circumstances, the Council Sub-Committee were absolutely right to take account of."

SOME SALIENT POINTS FROM THE WORKING PARTY'S REPORT PENNED BY JOHN JAMES, EDITOR, "TOTALLY T-TYPE"

The space required for Club Office current needs, based on inspection and interviewing staff was assessed at 2,300 sq. ft. compared with 2,061 sq. ft. currently provided. The main problem was identified as space for storage and ancillary activities and photocopying and postage. This (together with an assessment of future needs – see note below) led the Working Party (WP) to conclude ***"We believe that, should the garage/store be constructed, and the existing offices are brought up to a reasonable standard by carrying out necessary maintenance together with modest internal refurbishment, the present Kimber House should be more than adequate to house both the current and projected staff and Club Office activities"***.

Note: In assessing future Club Office space needs the WP considered that due account needs to be taken of the impact of technology, in particular, use of the Internet and electronic recording of archive material. This might manifest itself as a requirement to house different, as opposed to more staff, an increase in remote working, with consequential reduction in space demands at the main office, and the potential for the construction of a virtual, distributed archive and museum. In discussing the latter, the WP felt that a real museum was simply impractical - set up costs and ongoing maintenance would raise serious questions of viability - without major subsidy.

A separate report and assessment of a possible virtual museum and archive system is being made to examine this possibility in more detail.

Moving onto options for Club Office location, the WP identified what it considered to be six realistic options, of which the first "Stay at the present Kimber House with minimum necessary improvements" is the recommended option to Council (as set out in the Summary Report on pages 34 and 35 of this issue of TTT). Given that the recommended option is (in the Editor's opinion) likely to be accepted by Council and bearing in mind the space

constraints of this issue of TTT, the identification and discussion of the other options is largely academic so they will not be identified and discussed, except to point out that one of them is given as Option 2 in the Summary Report.

Notwithstanding this, the WP have, in effect, 'thrown down a gauntlet' regarding the present location. To quote verbatim from their report, they say ***"From a heritage point of view, the present location is close to the original site of the MG Factory, but we believe that the nostalgic or historic links are diminishing over time and have less importance to the younger members. We believe, therefore, that this should not be a primary consideration in making the location decision, especially if there are financial penalties."*** They go on to say ***"However, we are conscious that these conclusions are the opinion of members of the Council Sub-Committee (the Working Party) and may not reflect the views of the membership. We would welcome greater input from the Council members to help us gauge the membership's attachment to the Abingdon location...."***

To conclude what is probably an inadequate and hurried summary of what is a most thorough and common sense report by the Working Party (contrast this with the ill thought out, ill judged and irresponsible 'Kimber Palace' scheme) I must mention an excellent paper by Club Vice-Chairman and Working Party Member, Malcolm Eades, which is included at Appendix C to the WP Report. To get a flavour of Malcolm's paper I include below some quotes:

On recruitment of members ***"The potential is huge but we have perhaps been inattentive to building our numbers in recent times. The stark message of the finances brings membership recruitment back centre-stage and we must not allow it to move from this prominence."***

On what we offer to members ***"It is clear that we need to conduct a review of what we offer to members to ensure we are in touch with what they want..... It is a great risk for the Club Office or the Executive Committee to assume it knows what members want."***

On use of technology ***"We have a significant number of trophies and other historical items that are currently stored or displayed at Kimber House, but how many members actually see and enjoy them. What if they were displayed in a virtual museum that members could tour at their leisure on screen?"***

Very finally, the Editor is going to have his say on the question of the Abingdon location. Firstly, if the Working Party recommendation is endorsed by Council on 18th March then it is not an immediate issue. However, it is an issue that will not go away and I believe that for the MGCC, which was so closely associated with the Factory in the past, to abandon an Abingdon location would be unthinkable. It is not that long ago that Club members worked so hard to bring the Club Office back to Abingdon. To quote from a letter in January's ***Safety Fast!*** "the terms 'MG' and 'Abingdon' are inextricably linked ". Yes they are, and so they should remain so by keeping the last remaining link in the town.

There is no current financial imperative to move out of Abingdon and if the Club is run properly, neither should there be in the future.

Totally T-Type, March 2006 37

1953 TD Chassis number TD26632 Registration number NSV 775 Nicknamed 'Grumpy The Red Dwarf'. Completely rebuilt by Horam Classic Restorations (HCR) in East Sussex and valued for insurance purposes at £20K, A1 condition. Owner's health necessitates reluctant sale. 'Grumpy' will grow on you! Full history, records/servicing/maintenance by builder, Mark Gessey of HCR. Used mainly for classic/charity vehicle shows/MG events. Colour red with red leather interior. 1250cc unleaded, stainless steel exhaust, fawn hood and tonneau/side screens. Stainless steel luggage rack. A very attractive 'Totally 'T'-Type' with character and virtually as good as the day it first left Abingdon. Come and see it and judge for yourself! Priced at the top of the TD valuation range but well worth it. Telephone Mike Dorrington 0118 947 4834 for further details and an appointment to view. **(see photo on T Register website)**

For Sale: £12950 1951 TD registration number OSU 482 in excellent condition with unleaded head, stainless steel exhaust, beige hood, side screens and full tonneau cover. Contact Ian Andrew Tel: 01628 823725 **(photo on website)**

For Sale: 2 x XPAG cylinder heads, 1 set of + 30 new XPAG pistons, 1 set of XPEG con rods, 1 set of new door hinges for TD/TF, 4 enamel TF spare wheel medallions (yes, 4!), 1x door mechanism and strike plate T Series, 2 pairs TF carb air cleaners, Smiths heater unit, 2 x 'Y' type speedometers. David 0208 886 3080 (North London)

MG TF MIDGET SPARES For Sale: 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

For Sale: 5 as new steel disc wheels for TF, new tyres & inner tubes and new brake drums. Offers to Tony Smith 0208 440 4462

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.

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TF tonneau securing bars for back of seats, extractor manifold, Laystall head. David 0208 886 3080 (North London)

Wanted, pair of TD front brake back plate assemblies, contact Tony 01525 874716 LTM.SMITH@BTINTERNET.COM

Wanted Dipstick for TC gearbox, Oil filter to crankcase 'cradle' Ian Radburn 01395 514622

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