TREGISTER

Totally T-Type

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Roger Wilson's MGB-powered TD

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THE EDITOR

I recently received a non-renewal slip from a TTT subscriber, who told me that he needed to cut back on his spending. Fair enough, I thought – fortunately, I don't get many of these. However, the 'sting in the tail' was that he didn't see why he, as a MGCC non-member, should have to pay an extra 50% on top of the MGCC members' subscription to receive TTT!

Now that **did** rather make me sit up and take notice and I thought that I would take a couple of paragraphs of this editorial to explain the basis on which TTT is financed and demonstrate how close to the wind that we sail.

First of all "Totally T-Type" is produced as a Register publication of the MG Car Club. The 'T' Register is an integral part of the MG Car Club and TTT is produced essentially as **ADDED VALUE** to MGCC membership.

Mindful of the fact that members already pay their MGCC subscription, it is my objective to keep the TTT subscription at the lowest possible level, consistent with it not being a drain on the Register's finances. I can tell you that this is a very fine balancing act and we have only just managed to achieve it this year.

Printing costs for a full colour magazine are substantial, but if we had twice as many subscribers the printing costs would not be twice what they are – hence the need to revisit the issue of charging Internet "subscribers". Mailing costs are small by comparison, but are a growing proportion of the whole as Royal Mail continues to jack up the tariffs to compensate for the not insignificant loss in mail volumes due to the growth of e-mail. The Editor does not receive a salary – if he did it would sink the publication!

So there you have it! I should add that the UK subscription of £12 does not balance the books and it is only through the generosity of some members who top up their asked for subscription with a donation, through advertising revenue and through donations from some Internet "subscribers" that we survive!

‘T’REGISTER NEWS (Compiled by John James)

PAST EVENTS

MG Spares Day at Stoneleigh – Sunday 22nd February 2009

The Register stand was extremely busy for most of the day. One could be forgiven for asking “Recession? What recession?” Hopefully we will be back again for 2010!

‘Rebuild’ 2009 (14th March 2009)

By the time you read this, another ‘Rebuild’ event will have been held. I hope to feature at least one of the presentations in the May TTT.

FUTURE EVENTS

T-Types to Europe

Unfortunately, we had to cancel this event due to lack of support. A combination of factors, including the poor currency exchange rate did not work in our favour on this occasion.

‘T’ Party

A date for your diaries is **Saturday 18th July 2009**. We are going to Shelsley Walsh which is hosting one of the series of the Luffield MG Car Club Speed Championship events for 2009. Shelsley is the oldest motorsport venue in the world which is still used and you can have a browse at what it has to offer by going to its website www.shelsley-walsh.co.uk If you go to the Events section of the website you will see that the Porsche Championship is also being run on the same day.

Full details will be given in the May TTT and in the May “Safety Fast!”.

Silverstone International Weekend 2009

The provisional dates of 10th/11th/12th July are now confirmed. The event is being sponsored by Coys Auctioneers, who will be holding a major MG and sports car auction in a large marquee next to the Club marquee on the

Saturday. They have also sponsored two 55 minute races for 1950-1965 sports and GT cars.

The sponsorship offered by Coys is a major boost to the event and has enabled the Club to offer a number of attractions which it would otherwise not have been able to stage. With the guest attendance of the Austin Healey Club, who are putting on a display of Big Healeys from their famous rally era, the Silverstone International Weekend looks set to become a truly memorable event.

As a prelude to the event, why not join the Tour de Sliverstone (see page 28 for details).

SCOTTISH BORDERS TOUR 17/18/19 AUGUST 2009

All participants, including those who are not staying at the event hotel, should have full details by now. The event organisers are John and Claudette Bloomfield 01992 576357 or 01890 882445 – if you don't get a reply on one of the numbers, please try the other.

THE AUTUMN TOUR 2009 11/12/13 September 2009

This will be based at the Moorland Links Hotel, YELVERTON www.moorlandlinkshotel.co.uk on the southern edge of Dartmoor National Park and will take place from **Friday 11th September to Sunday 13th September 2009**. All participants should by now have been contacted by the organisers.

If you have booked and have not heard from them, or if you have not booked and wish to join the Tour, please contact the organisers Geoff and Annie Matthews 01840 214972 geoff.matthews@yahoo.co.uk .

THE AUTUMN TOUR 2010

The 2010 Tour will be based on The Metropole Hotel, Llandrindod Wells. The hotel website address is: www.metropole.co.uk Tel. No:01597 823700, and e-mail: info(at)metropole.co.uk Being in the heart of Powys the opportunities for day routes that combine superb scenery and Cambrian Mountain passes together with lakes, dams and maybe even a quick look at Cardigan Bay coastal scenery seem overwhelming. Names that some will be familiar with include Elan Valley, Devils Bridge, Tregaron to Abergweswyn, Bwlch y Groes (Hell Fire Pass) and maybe even Tallylyn and the Dyfi Estuary as an optional choice. The Tour organisers are Graham and Sue Brown graham(at)isisbedford62.freeserve.co.uk

THE AUTUMN TOUR 2011

The 2011 Tour will be based on Skipton, North Yorkshire. The organisers are Grant and Barbara Humphreys grant.chumphreys(at)btinternet.com

INSTALLING AN MGB ENGINE AND FORD 5 SPEED GEARBOX IN A TD

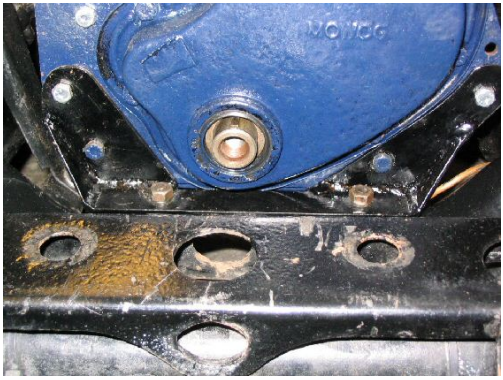
Over the many years of ownership of my TD I had improved the performance of its XPAG engine by boring it out to 1380cc and going to stage 2 tune. However, I still thought the car was underpowered (I never did find a cheap XPEG engine), and I had become dissatisfied with the reliability of XPAG engines. I was interested in the Hi-Gear 5 speed gearbox conversion, but had the dilemma that I might be fitting a kit to an engine that I didn't think was ultra-reliable and wasn't over powerful. Then in Sept 2004 I read in TTT the article "Phoenix Rising" by Bob Hughes, in which he describes installing an MGB engine and gearbox into a 1951 RHD TD. This got me very interested, as I had talked to Peter Gamble of Hi-Gear and found that 5 speed gearbox kits were now available for the MGB engine. Peter Gamble also established that I could be given contact details of a TD owner who had already undertaken what I was planning. I was subsequently given a ride in his car and was much impressed with the performance. I also took some dimensions from this car, plus other dimensions from Peter Gamble and Bob Hughes, and confirmed to myself that the Hi-Gear MGB bell housing would fit under their TD plastic gearbox cover and through the existing TD bulkhead aperture. I also made contact, via email, with other T-Type owners who had fitted MGB engines, usually with the MGB gearbox, and they were all very helpful and positive about the results. Then in late 2005 I ran a big-end, and that made me decide to install an MGB engine with a 5 speed gearbox instead of repairing and persevering with my existing set-up, although I did later repair the damage.

I contacted Hi-Gear and ordered the bell housing and crankshaft end bush for an MGB engine, the prop-shaft, gearbox rubber mount and support plate, gearlever, gearbox cover and speedo-cable for a TD, plus the necessary bolts etc. The Ford Sierra gearbox came from a local vehicle dismantler, and has proved to be in good condition. The MGB engine, a 1976 unit with upward mounted oil filter to miss the TD steering column, was bought second-hand and partially reconditioned. The engine runs very well, but I now wish I had exchanged it for a balanced reconditioned unit. However, I do advise anyone doing this mod to cut a large notch out of the rear bearer plate to allow better access to the pipework feeding oil into the block. I didn't think of this until the engine was installed, but if the engine ever comes out, it will be the first thing I do.

With my XPAG engine and gearbox removed, the gearbox area was prepared as per the Hi-Gear instructions, although I did cut off slightly more metal from the brackets on the cross tube. This allows better access to the bolts clamping the rubber mounting to the support plate, and anyone doing the mod will see why. The MGB engine, Hi-Gear bell housing and Sierra gearbox were then bolted together, with the bolts that clamp the bell housing to the engine rear bearer plate all pointing forwards. This ensured that there were no threaded ends that could foul the bulkhead when the engine/gearbox assembly was fitted in the car. To operate the clutch, the principle used by Bob Hughes was

followed, but as my car has a rod, rather than a cable, from the pedal, I only needed the forward swivel arm, for which the standard TD item was used. I hope the photo *(right)* shows what was made up, and it is secured in position by nuts on three longer sump bolts. Observant viewers will note there is no return spring on the swivel arm; this does not seem to affect operation, but I may eventually fit a spring to stop a slight rattle when idling. The connecting shaft to the clutch arm is the standard TD item, except that the clevis system at the clutch arm end had to be cut off and the MGB clevis rod (that normally goes into the hydraulic piston) was pushed into the hollow connecting shaft. The central hollow had to be opened up slightly to take the rod, but this was only for the required depth of entry, so the rod will not go in any further, and the rod was not welded in position, thus allowing it to rotate to its own position. The axis of pivot of the clutch arm is not parallel to the pivot of the forward swivel arm, and this could be felt when operating the clutch, so a slight kink was made in the connecting shaft to make this operation easier. Perhaps I should also say that my car has the pedal box removed, leaving only a small projection to hold the brake pedal return spring. I consider the pedal box only retains muck and prevents access to the pedals, particularly as my pedal shaft has internal drillings and a grease nipple at the inner end to allow the pedal bushes to be greased.

The engine/gearbox assembly was then placed in position on the gearbox mounting, and held horizontally with a hoist; it was confirmed not to touch the bulkhead, see photo *(right*). A front support bracket was made up similar to that made by Bob Hughes, see photo *(top left on next page)*, although the final height had to be made with a packing piece. It was found that the engine pulley was forward of the mounting system, so fitting the



fan belt would present no problems. However, a portion of the engine front bearer plate had to be cut off so that it did not hit the torque link bracket bolted to the chassis. A bracket for the engine end of the torque link, see photo *(top right)*, was made to project up from and be bolted behind the front bearer plate, and one of these bolts was the special stud that holds the dynamo strap. The torque link has since been changed for a simpler one made from M8x1 studding with a tubular spacer between the normal metal cup washers, rubber bushes and one right hand thread castellated nut at each end. Final adjustment was made by inserting washers. The prop shaft was also fitted at this stage.

The distributor was then fitted, and this required the steering column being adjusted to its lowest position. Even so, a flat had to be filed on the distributor cap to gain about 6mm clearance, and it has not yet touched the steering column. One of the more recent high torque starter motors was fitted under the steering column. I had planned to retain the TD dynamo, as I wanted to use the rear drive to the rev counter. This affects the oil filter, which I will mention later. To fit the dynamo it is preferable to use an early rear bracket, which was used when the MGB was fitted with a dynamo, and which bolts to the rearmost two tapped bosses on the side of the engine. I obtained the wrong one, and had to drill new holes for the bolts into the bosses. I also fitted the water pump, but without the fan blades and spacer at that stage. For the rev counter cable to

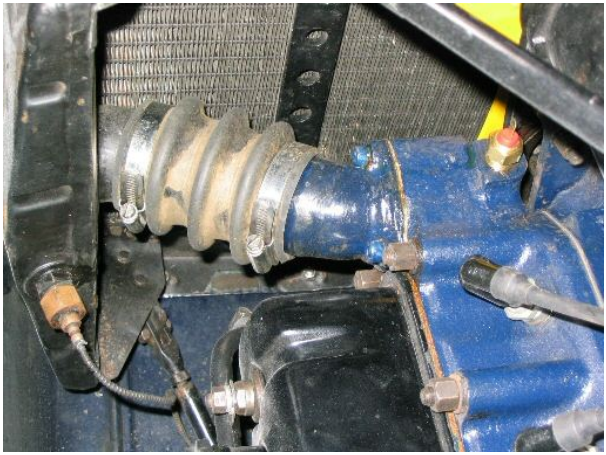
miss the oil filter the dynamo needs to sit higher, so the TD dynamo strap was used, although flattened, see photo *(bottom of opposite page)* In addition, the dynamo pulley was changed for the pulley from an MGB dynamo; it is a direct fit, and a DAYCO 10A0950C (6705) fan belt was used. The dynamo rear bearing may now last longer as the sideways force at the front is closer to the dynamo front roller bearing. The wiring for the dynamo and ignition was completed by extending the wires from their original positions through clamps on top of the bulkhead; even the coil was not relocated.

Regarding the oil filter, even though the dynamo sits quite high, the normal filter cannot be fitted under the rev counter cable. Instead a shorter FRAM PH5911 oil filter was used. This screws straight on, but the internal tube on the filter mounting had to be cut short. This must be done with the tube removed from the mounting, and any swarf cleaned off, as it will otherwise go directly into the oilways. As the oil filter is smaller I simply change it more often. The oil pressure gauge hose also had to be longer, and an appropriate one was made by a local hydraulics stockist using my original end fittings. Also fitted, at the end of the work, was an oil cooler, which sits under the front valance. The front number plate was mounted in front of the front bumper to ensure an adequate airflow. It is only a 10 row cooler, and my oil temperature gauge indicates that the temperature does go over 95 deg C in Summer. I do have a 13 row oil cooler, but I am still working on how to install it under the front valance without reducing the ground clearance. The photo *(below)* shows that side of the engine, although the coiled up original rev counter cable has since been changed for one of an appropriate shorter length.

For the radiator, it was decided to leave on the bottom water outlet, but blank it off with a rubber bung and clamped (red) plastic cap *(prominent in the previous two photos)*. As the MGB water pump inlet is facing the LHS of the car, the radiator drain plug fittings were removed by heat from the base tank, the hole enlarged to 25mm diameter but offset outwards, and a new outlet soldered in this position. The outlet was made from a short length of 28mm OD copper pipe, one end of which had been heated and bent outwards all round to give a 6mm flange without splits. This was the end soldered to the base tank, and the pipe was then cut to 20mm long, onto which was soldered a 28mm Yorkshire 45 deg elbow, pointing upwards. An MGB bottom hose was then fitted, but it was not long enough to reach the water pump inlet. Thus it was cut through in the vertical section, and a short length of 28mm OD copper pipe inserted, see photo *(above)*. The use of the MGB bottom hose also allowed me to use the pipework and cylinder head side valve to connect to hoses feeding my existing under-dash heater, although I have not fitted the cable to control the side valve.

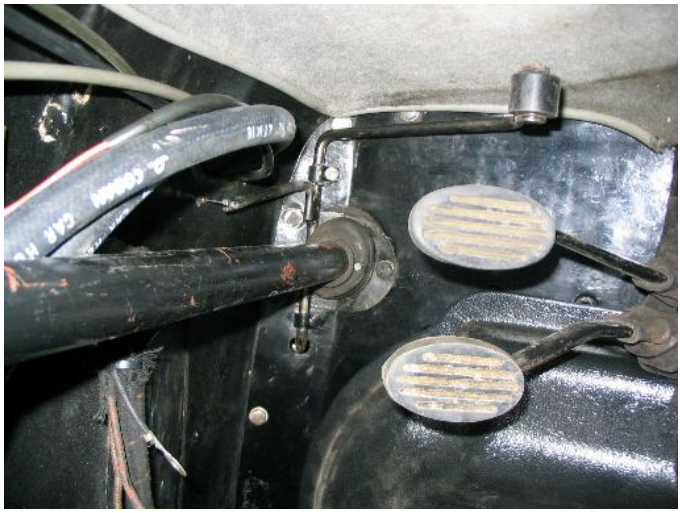
For connecting to the header tank an MGB outlet casting (that bolts onto the cylinder head) was taken, and the dome and side pipe machined off. This left only the flange, and into the slightly enlarged central hole was pushed a conveniently kinked short length of 54mm OD exhaust pipe. This assembly was bolted to the cylinder head, and the pipe turned until it pointed towards the header tank inlet pipe. Then the assembly was removed and the pipe brazed into the flange. This unit was then bolted, without a thermostat, onto the cylinder head using three stainless steel flat washers and allen head set screws, although the outside diameter of the allen heads had to be ground down and the washers needed a flat on one side to get them to fit. This allows the normal TD top hose to be used, see photo *(top of opposite page.)* The standard temperature sensor in the header tank was retained, although the MGB temperature sensor is still in the cylinder head. Finally the fan blades (three) were cut down to a maximum length of 102.5mm, with large corner radii, so that they did not hit either the new or old outlet pipes in the radiator bottom tank. The spacer was machined down to a thickness of 15mm, and then fitted with the fan blades to the water pump. The cooling system is not pressurised, yet even with the slightly smaller fan blades the water temperature does not go

above 85 deg C. The lack of radiator drain plug or valve has not caused a problem.



Moving to the manifolding, the normal MGB inlet and exhaust manifolds were fitted, and this allows the vacuum tube for the distributor advance/retard to be fitted. The carburettor mounting studs were then changed for shorter ones, like those holding the manifolds to the head, but I found that the threads still needed to be extended with a die. The heat shield (with mods, see next) and carburettors were then fitted without the thick black spacers, although gaskets were put on either side of the heat shield. In the heat shield two holes must be cut to clear the central return springs on the throttle shaft, and an extra dent must be tapped in to clear the boss on the forward side of the front carburettor. Air filters are not used, and this arrangement means that no holes are needed in the bonnet side panel, which I would not have accepted anyway. The carburettors are even inboard of the radiator support strut, although the one on that side does bow out slightly, see photo *(right)*.

The carburettors do not get hot as there is so much airflow through the slots in the bonnet side panel. My carburettors are the HIF type, and the throttle flaps were fitted with the later overrun valves. I fitted plain flaps, but the car does not suffer from overrun. The TD choke cable was easily fitted, as were the plate, return springs, etc for the MGB accelerator cable. The other end of the accelerator cable passes through a 5.65mm diameter hole in the upper bulkhead, below



the fuel pump, as can be seen in the photo *(left)*. This hole must be above the end of a 115mm long arm welded onto the TD accelerator pedal shaft, immediately to the left of the right hand swivel block, see photo *(below left)* This arm had a slot cut in it's outer end to hold the inner Bowden cable of the accelerator cable. The other end of the accelerator pedal shaft was cut off just before it went through the hole in the bulkhead, and the hole fitted with a rubber plug. On the carburettors, a long fuel hose was run through the new bulkhead clamps (already holding wires and the oil pressure gauge hose) to the fuel pump, which was left in it's original position. Other hoses were then fitted for the fuel overflow and the tappet chest oil mist extraction.

When the MGB exhaust downpipe was fitted, the outlet ran just below the chassis cross-tubes, obviously on the left-hand side of the car, *(photo p.7)* An exhaust system was made up with straight piping and the two MGB silencers, although there is a slight dip below the rear axle so that the pipework does not get hit when the axle drops to the lowest position of the axle straps. The

system is supported by rubber mounts bolted to straps that are clamped around, but not welded to, the cross-tubes.

Inside the car the floorboards needed some slight trimming around the gearbox, plus when the plastic gearbox cover was fitted I found it rather close to the gearbox in some places. This was resolved by heating with a hair drier and gently pushing the plastic away. However, I did find it necessary to enlarge the aperture through which the gearlever projects, and, most essentially, the gearlever was bent back by about 30 deg, by heating, to put the gearlever knob in a more convenient position. The discolouration of chrome at the bend is hidden by a sleeve on the carpeting.

In line with Bob Hughes' other modifications, I had previously fitted early MGA wire wheel suspension front and rear, giving 10" drum brakes and a 4.3:1 diff. This ratio was taken into account when I had both the speedometer and rev counter recalibrated. I had to do some accurate maths to ensure that they read correctly. The car gives 27mpg, and allows me to drive in 4th or 5th gear most of the time, even up hills. I can easily keep up with modern traffic, and even overtake lorries on motorways, so the results are well worth the work and expense involved. The DVLA and my insurance company were informed of the changes, and I have changed the bulkhead plate to one showing the new engine number. I have many other photos for anyone interested in doing the same exercise.

Roger Wilson, 11-10-2008.

T-Types and Modern Fuel

Modern fuel is different from that of the 30s, 40s and 50s, when our engines were designed. Don't take my word for it; visit the BP website www.bp.com.au/fuelnews which explains in detail. To summarise; modern fuel needs: High compression ratios/high temperatures/very fine atomisation.

T-Types have none of these (carburettors are no match for fuel injection) so what can we do?

Rolling road testing, contributions from members and my own experiences (TA with MPJG engine) have provided me with information which after interpretation I offer in good faith (I am not an engineer).

Modern fuel burns much more slowly in our engines, even to the extent that at high speeds, fuel may still be burning as it leaves the exhaust valve on its exhaust stroke. Advancing the ignition 5 deg or so may help. Some engines would benefit and some may not, but because modern fuel tends not to "pink" it is difficult to know if it's too far advanced. I cannot be more specific but do recommend you use a stroboscopic timing light to set your ignition. The position of the timing marks on the front of the engine is just not helpful. I made an extra pointer out of stiff wire, bent to be close to the front edge of the pulley *(see photo on left).* Some white paint and a posh "dial in advance" strobe lamp made life easier. Checking the maximum advance (30deg at 3000 rpm for example) is more important than tick over. I am presently using 10deg at tick over, which with my distributor advance curve gives 30 to 35 deg at about 2,500 rpm. This feels right with a 6.8 (ish) compression ratio.

Carburettor needles and mixtures are not easy either. Starting with the TA the 'T' Register helped fund the tuning of Martin Moore's TA. Martin's engine runs pancake filters and as expected, the standard AC needles were too weak. After testing, number 2 needles were selected. I run a K

and N type filter *(pictured right)* so installed number 2 needles also. This gives a richer mid range improving pick up. If you do retain the standard canister filter I feel a number 2 would be a good choice anyway.

I now expected to have a biscuit plug colour. Not so! Instead, various shades of white indicating a lean mixture and the different burning characteristics of modern fuel. On the face of it the car goes OK. So is it a problem? Yes. The plug colour gives a good idea of the exhaust valve colour and therefore its temperature. A white plug means a white exhaust valve means trouble. Burnt valves and seats mean an expensive head job.

To achieve a darker plug, a richer mixture is one way to go. I tried several needles and ended using AVs. This is seriously rich compared with a number 2 and indeed the AC standard needle. Have I achieved a biscuit plug colour? No. It's a dark white/light grey. The exhaust valve is however a light straw colour. If you can get a biscuit plug, good for you.

James Thacker recently wrote an interesting article about his TF (1250 1½" carbs.) on a rolling road. The standard GJ needle was changed to a number 4, generally richer. I suspect a 1500 TF could try a number 6. If my "go richer" policy is followed, a 1250 XPAG with 1¼" carb owner might like to try a number 2 or number 4. Will it use more fuel? Probably!

May I may make a point on carb. tuning? The traditional method is to adjust the mixture on tick over by lifting the dash pot a 1/16th and detecting a small increase in tick over. On my engine my exhaust analyser measures 6/7/8% CO. At the rolling road the tick over may be adjusted with an analyser to 3/4/5% CO which is typical of MBG/ Midget and indeed a T Type will tick over at these low levels. The problem is that this may be 3 flats weaker on the jet and will subsequently be 3 flats weaker throughout the rest of the range.

The TF with 1½" carbs. GJ needles was meant to be very rich on tick over (ref: Don Jackson, "Your SU Companion").

Testing engines on rolling roads gives us valuable information. Any member who has done so..... please, publish the results. I have been

testing during this Winter and look forward to Summer temperatures and Summer fuel to confirm or not my thoughts.

Adjusting our engines to suit modern fuel is trying to make the best of a bad job. Modifying the fuel with kerosene may be a better option. Either way, I feel that there is some way to go before there is a clear solution.

David Heath

Ed's Note: Picking up the kerosene point from where David left off, Paul Ireland has taken a different route from David's with less emphasis on tuning and more on modifying the fuel to more closely replicate the old 2-star 92 octane petrol. He describes the circumstances which led him in this direction and the results of his experiences so far in the following article:

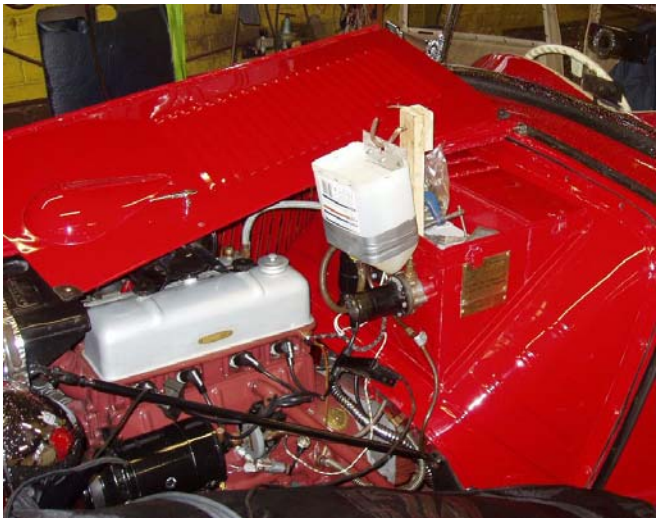
A Tale of a TC, Tractors and Modern Fuel

I have owned my standard tune TC since 1968 (or at least as standard as a 60 year old engine can be). In the old days it ran "like a dream" on leaded 2- star petrol. Since that went out of production, the TC's state of tune has gone steadily downhill. Over the years I have tried everything to get it running properly, mostly without success. At one point my attempts to get the petrol level to between 1/8 and 3/16 below the bridge of the carburettor resulted in flooding caused in part by the specific gravity of unleaded fuel being higher than that of leaded petrol.

In 2006 I took TC to a rolling road. The richer needles, I was trialling at the time, were replaced with standard ES needles and the timing was advanced to 13˚ at tick over. TC ran considerably better, but still not as I remembered. It suffered from fuel vaporisation every time I stopped after driving for more than 20 miles, the engine did not rev happily and if I cruised at more than 3000 rpm the water temperature rose from 70˚C to 85˚C and the oil pressure dropped by ~3 lbs/sq in as the oil got hot.

Remembering my earlier communications with Shell on specific gravity, my thoughts turned to modern fuel, blaming the higher octane rating of 4-star petrol for my problems. This started me on a trail of research that confirmed my original suspicions; today's petrol is not what it used to be.

It all started with an article on substitute Tractor Vaporising Oil (a fuel for 1950's low compression tractors) made by mixing kerosene (paraffin or 28 second heating oil) with petrol. I began my tests with a 15:1 petrol to kerosene mix as the calculations suggested this would give a 92 octane fuel (2-star for those who were too young to remember leaded petrol). When TC ran better on this mix, I contacted HM Customs and Excise who agreed to issue concessions allowing the use of kerosene in pre 1956 cars. I could now continue my trials legally.



As the tests with various ratios appeared to improve matters, I took TC to a rolling road again, this time armed with several bottles of different petrol/ kerosene mixes and a small tank that could be attached directly to the fuel pump. With the timing now set 11˚ advanced at tick over, I managed to run tests with 5:1 and 10:1 petrol to kerosene mixes. Not only did the engine run much better on both mixes, but the addition of kerosene reduced the Hydrocarbons (unburned fuel) in the exhaust to ~80% and Carbon Monoxide to 70% of "pure" petrol levels - both measures indicating the fuel was burning better.

Needless to say the issue is complex and nothing to do with octane rating. After lengthy communications with Club members and BP Australia I can offer a possible explanation. Today's fuels contain a much wider range of volatile chemicals than 1950's petrol. These burn at higher temperatures and increase knock resistance in modern high compression engines. Unfortunately, in our lower compression, cooler running engines these additives cause the fuel to burn too slowly and probably incompletely at higher revs. In effect, the mixture becomes leaner with increasing engine revs, showing itself as David's white or grey plugs and my overheating. Needless to say lean running can damage an engine.

Richer needles can only partially address the problem. The lean running is revs rather than load related and carburettors work on load (throttle setting) not engine revs. Advancing the ignition timing gives more time for the fuel to burn. However, with a 35˚ advance at 3000rpm, my advance setting after the first visit to a rolling road, the mixture is starting to ignite when the piston is only 2/3 way up the bore after which it has to "fight against" the expanding gasses for the remainder of the compression stroke. Adding kerosene improves fuel burn possibly by releasing more heat than petrol and catalysing the burning of the heavier additives but still requires a

relatively large advance setting. Unfortunately, none of these solutions are ideal.

I now use a 10:1 mix and have completed a couple of long runs (350 and 100 miles). Certainly TC runs better than on pure petrol; it revs more happily, sounds sweeter and does not exhibit overheating when cruising. At high revs the mixture does not weaken, as shown by the picture *(above)* of the biscuit colour spark plug taken after a 70 mile 3100 rpm cruise. In my view all positive indications that kerosene improves the way my engine runs.

I am certain kerosene is not the end of the story. There are probably other petrol additives which along with different needle/timing settings will improve matters. My hope in writing this article is it will make people aware that modern petrol is different from the fuel our cars were designed to run on, to stimulate interest in this subject and encourage others to explore alternatives. By sharing our knowledge and experiences I am certain that one day we will arrive at a better compromise.

Paul Ireland

'T' TYPE TALES – No. 3

This is the third in a series of articles from Colin Pamplin. The two previous ones chronicled Colin's experiences with TCs he owned many years ago; this article describes how he once again became an owner in 2001……

You would have thought my previous TC experiences forty years ago would have made me a wiser person – not a bit of it. A chance remark in the Edney motor home at Silverstone in June 2001 set off a chain of events which, in March 2004, saw me once again in the driving seat of a TC.

TC2870 (Registration Number CFX 542) was a basket case. A previous owner had stripped it completely and had, sadly, died before he had a chance to rebuild it. George Edney had acquired the bits and dry stored them with a view to building them into a race car. That didn't happen and, after a number of glasses of wine and much negotiation, a deal was done. "Is this a TC in bits or bits of a TC?" I questioned - "Oh it's all there" was the answer. In fairness, it was – almost!

A visit to the 'Aladdin's Cave' at Millside (George's house and workshop) in September confirmed my belief that I was off my head. As the workshop doors were pulled open, the full realisation of what I had let myself in for, hit me - parts were everywhere.

Sept. 2001 "Is this a TC in bits or bits of a TC?"

Fortunately it was dry, so we spent the day emptying drawers and boxes and laying out, now vaguely familiar bits, on the grass and photographing them.

A wizard plan was devised. XPAG Engineering would rebuild the diff, engine and gear box and have the chassis powder coated. The steering box – on holiday with Dave Saunders – was to be repossessed and the front axle re-bushed. Brother, Chris, and I would do the rest – that included my paying for it!! Bits were loaded into the back of brother's Peugeot and, still questioning my sanity, we set off for Cornwall.

In the peace and quiet of my own garage, an assessment was made of what to restore and what to scrap and replace – this car was obviously not

going to be 'original' – it already had a replacement engine and the body tub had been scrapped.

Safety could not be compromised, so the decision was made to replace all the brake parts, springs, suspension bushes and track rod ends. Pitman arm and stub axles were to be crack tested and all five wheels rebuilt. A Moss rebuild discount came in handy, plus the services of another 23 companies or individuals together with Mike Sherrell's – "TCs Forever!" and the considerable skills and encouragement of brother, Chris.

December saw a refurbished chassis sitting on two trestles in my garage and numerous boxes and packets cluttering my office and living room. The plan was to marshal all the parts together prior to starting the rebuild. This took a bit of time as I made the decision to collect the larger parts from the suppliers or rebuild specialists, personally. Regular trips to places as far apart as Bradford and Newquay were commonplace throughout the next year. What It all cost, I dread to think – everywhere is a long way from Cornwall!

At last on the 7th March 2002 brother and I, dressed in clean overalls, spent the next three days wielding socket and spanner, to produce a rolling chassis. We then shut the garage door to await the next phase.

Another trip to Millside to collect the engine and the remaining bits led, early in July, to the fitting of the power train. October saw the collection of the new body tub from Hutson's at Bradford and its trial installation, together with the original body parts, on to the chassis – another long weekend's work.

We now transported the partly-finished car to Tamar Valley Motoring Centre at Callington for Colin Bird and his merry men to strip and spray it. Due to their pressure of work, however, this took until June 2003 to complete.

Back home again the final fitting out began. On October 16th, amid much celebration, the engine fired up first time and CFX 542 was live. More detailed work followed and an old Triumph Herald's front seat was temporarily fitted to enable the car to be MOT'd. She passed with flying colours on January 7th, 2004. Now came the stressful bit; the upholstery was 'shot' and the internal trim had long gone. I entrusted the replacement work to Autotrim at Ivybridge, Plymouth where, Ian Roper listened to my plea for originality and smiled – "Don't worry, we can mess it up as well as anybody"! I was relieved – I liked this man.

I then went off to New Zealand on holiday for 8 weeks and left them to it. On my return, first stop Ivybridge. Had they carried out my instructions? The car was under wraps. I asked Nick, the guy who had done the work, to leave me on my own for the unveiling. The speed with which he

disappeared from the shop, worried me. In fear and trepidation I peeled back the covers. There she was – hood up and side screens fitted; new leather seat covers, carpets, internal trim, door panels with pockets that fitted properly and half and full tonneau covers thrown in for good measure. They had even managed to salvage the original Dunlopillo seat mouldings. She looked magnificent! Suddenly, all those months of work were worth it.

On the 30th March, 2004, after 33 months of graft and negotiation and not inconsiderable cost, I turned the key, fired her up and with the hood down, set off down the A38 for home. I was a bit apprehensive as I found I was being tracked by two large buzzards, however, they gave up after a couple of miles and I made it back without incident!!

Since then CFX 542 has been used frequently – Sunday paper runs, Natter Nights, Silverstone Internationals, the Hero 2006 Scottish Malts Classic Tour (5 days and a 1,000 miles of Heaven, added to which Chris and I won 'The Spirit of Tour' award for being generally all round good eggs) and any other excuse for a run out.

Would I do it all again? - You Bet – but that would be another tale!

Colin Pamplin

TC2870, Registration number CFX 542, 'T' Register Number 656, the subject of this article, looking good - it's hard to believe that this was the TC that was bought as a pile of bits!

The TA/TB Tickford Register 2009

Bill Hentzen (TB0437) has written to me as follows:

"With my 3 colleagues in the Tickford Registry, the 2009 edition of the TA & TB Tickford registry list has been published and is available only to Tickford owners. This expanded and enhanced edition lists some 170 world wide locations of the 309 TA & TB Tickfords built - some to the tip. The spiral bound 75 page heavy paper book is all in colour with some 35 pages of the cars and lists owners and contacts, chassis, Salmons and engine numbers along with production dates and history including original owners where known. Carlyle Merritt again did a superb job with data entry, layout and printing.

To owners and holders of previous 2004 and 2006 editions, complimentary copies of the amendments are available, if preferred.

To cover the cost of paper, pricy colour ink, packing and postage we ask for help and owners who wish a copy of the book kindly please email, call or write to reserve a copy or receive a copy of the amendments. Costs are £25 GB Pounds Sterling or 30 Euros post paid. Contact: Brian Rainbow 01926 612 415 brian(at)brianrainbow.free-online.co.uk 2, The Beeches, Harbury, Leamington Spa, Warks. CV33 9LW"

Ed's Note: Bill also sent me a copy of the introductory page of this wonderful publication and I thought that readers might like to know the history of how this publication came about. I've reproduced the information on the page minus the photographs as follows:

"The Tickford Registry list of M.G. TA and TB models started in 1966 when Wiard Krook (TA2575) began collecting data on these cars. The information was further updated with Alan Turner, 'T' Register, MG Car Club in England from 1975. Also in 1975, Ken Spencer, New England MG T Register, published a list of owners, which continued the international exchange and inventory of car numbers, owners' names and locations. After Ken sold the Tickford, the list passed first to Scott Barrows and then to Bill Hentzen (TB0437) in the USA and

to Ian Lloyd (TA2849) in Great Britain, who published, maintained and issued amendments to the Registry list in the 1980s and 1990s with Wiard's ongoing contributions.

It was around 1979/80 that Dominic DeCesare, in concert with Wiard, tracked down Cliff Petts, Historian for Aston Martin, successor to Salmons and Sons, and were able to secure partial records of TA and TB Tickford production and original owners. Original records are lost. Dominic and brother, John produced a CD containing TA and TB M.G. Factory chassis records, Tickford production files and Rover Tickford files for our research. We are most grateful to them for their contributions.

Stewart Penfound, TA, B and C Registrar for the MGCC has been of great help with researching data for this edition.

With the loss of Ian Lloyd in 2002, Rod Sawyer took over the Tickford baton for the MGCC 'T' Register and TA2849 passed to Rod's good hands. It is with considerable regret we advise that effective May 2007, Rod, who served with distinction, has resigned his post. Rod lost his battle with cancer, March 2, 2008.

With great pleasure we announce it is being assumed by Brian Rainbow, a long standing friend of both Ian and Rod. Brain was raised in Newport Pagnell and owned a TA Tickford (CKY 244) in 1963. He still runs a TA roadster – welcome aboard! The location of CKY 244 is unknown.

In 2003, Carlyle Merritt (TA2959), offered to enter these accumulated records in a database. He did the design, scanning and layout of the photos, performed the considerable task of data entry and did the printing of this Registry. We are in considerable debt to Carlyle for his donation of his time and talents in this effort to publish this Registry.

As requested by the owners, this Registry is circulated only among contributing owners and is not published for public distribution or sale.

Wiard Krook's research includes a letter from Aston Martin indicating that a total of 320 M.G. TA/TB Tickfords were built, but other of his records account for only 309. He divides the 309 into 252 TA {3003 chassis} and 57 TB {379 chassis}. At this time we have identified 117 TA and 33 TB. We have been unable to make recent confirmations on some car and owner locations and the undersigned would be most grateful to receive any information, any corrections and updates.

We extend our thanks to all the owners for their contributions of their car information and many photos. It is hoped to expand our little fraternity to better share our special M.G. affection and to continue to assist each other in rebuild and maintenance. (Letter from Bill Hentzen, Sumer 2004 – updated 2008). ***This publication is a joint global effort by the four present or past Tickford owners listed below:***

Bill Hentzen, Wisconsin, USA, Carlyle Merritt, Iowa, USA, Brian Rainbow, Leamington Spa, UK, Wiard Krook, Diemen, The Netherlands.

Cover Photo 1951 MG TD "WHR 154"

My TD was a right hand drive export model, destination unknown, which came back to the UK in 1960. I purchased it on the 31-1-1968, so I have owned it for 41 years.

After owning the car for about 5 years I fitted the front suspension and rear axle from a scrapped wire wheeled MGA. It was an early model with 10" drum brakes, which are larger than the TD 9" items, and very effective. This work was described in an article that appeared in the December 2001 issue of the Bulletin, the predecessor of the TTT. The speedometer was recalibrated to match the 4.3 diff. At the same time I fitted a Y type anti-roll bar, plus swapped my TD seats for a pair of TF bucket seats. I found them rather upright and not very comfortable, so eventually I had the rake of the backs increased, and they are now quite reasonable.

Over the years I improved the performance of the XPAG engine by taking it to 1380cc with stage 2 tune and an original AEG122 camshaft, plus the usual lightening, balancing and gas-flowing mods. However, running big-ends was always a problem. An XPEG engine was a thought, but they were always expensive. In 1996/97 a new body was fitted, and in 2001/02, following a bad accident on the M25, the car was fully restored.

Finally in 2006, after running another big-end, an MGB engine and Ford Sierra 5 speed gearbox was installed, as described elsewhere. This heavier engine makes the front sit slightly lower, and has the apparent effect of softening the front springs, so the ride has improved. To make the rear of the car sit lower I had the curvature of the TD rear springs flattened to halfway to that of TF rear springs. This means that the rear of my TD does not stick up in the air, nor does it sit rather low, as for a TF, and allow the axle to hit the bump-stops when going over speed humps.

The power of the MGB engine and the fifth gear makes the car much more relaxing to drive, and I probably will not do any other changes as I now do less than 1000 miles a year in the car. I do have thoughts about a subtly altered radiator shell to make the front view more attractive, but that would be expensive, and not strictly necessary!

Roger Wilson

Preparing and Presenting Small Parts For Re-chrome Plating

PART 1

Eric Hayes, Australia

Writing this, I intend to explain some of the little things that you can do to help the electroplater to return to you the best possible job. Small parts only, not bumper bars and radiator surrounds but the myriad of small parts MGs abound.

When I first took some small car parts to be plated many years ago, I was amazed to see women tying all my screws, brackets and bolts onto pieces of copper wire, not only mine, but also everybody else's.

How did they not get one lot of parts mixed up with another, which looked exactly the same and also during the whole process did not lose some?

The small parts I have in mind are sometimes referred to as 'jewellery parts'. Such as wing nuts, dome nuts, radiator cap, fuel filler cap, bonnet catch handles, seat adjusting brackets, gear lever, mirror brackets etc., etc.

This photo shows a sample of the parts mentioned above.

There are many more of course, but I did not want to dismantle many more from my car!

I hope to present these tips in ascending order of the owner's involvement.

Firstly, a general description of the electroplating process leading up to the final chrome plating. There might be some that may already be aware of the plating procedure, but others may not.

When mentioning chrome it is bright chrome that is alluded to.

The general process used in the original electroplating of your parts was the deposition of layers of copper, then a layer of Nickel and then finally Chromium.

To use an analogy with the paint work on your car – undercoat, colour coat and polish – copper is the undercoat, nickel is the protective coat and the chrome is equivalent to the polish. The chrome layer is extremely thin.

In the electroplating process, metal is transferred from an anode of the metal to be deposited to the cathode, which is the item to be plated, by electrical current.

There are a lot of factors of course that affect the final outcome and finish – too complicated to go into here, and I am not an expert anyway; but basically, the finish you start with is the finish of the end result. So, the base metal needs to be polished or very smooth to start with. Any damage has to be carefully repaired and polished as well as can be achieved.

There is a saviour in the form of the copper coat.

If there are blemishes to be removed a thick coat of acid copper is deposited and then the item is rebuffed until the surface is highly polished and perfect, before the nickel is deposited and then the final flash of chrome.

Before items can be re -chromed the existing chrome and nickel layers have to be removed. This is done by basically reversing the polarity, by using a different bath and a lead cathode.

So, as you will gather, your parts are handled frequently; apart from the polishing, they are transferred from bath to bath numerous times.

The first small tip is not to do as many do, that is, front up to the Electroplater with a container – usually a 1 or 2 litre ice cream container (these are preferred for small parts as there are no corners or folds to trap small items) - drop this container of mixed and generally unidentifiable parts and say "Could I have these re-chromed , they are from my TC - any chance I could have them by the weekend as I intend to reassemble the car on Saturday? "

Make it a little easier for them by including an inventory of the parts in the container. Two bumper bars and four overriders are pretty obvious, but a

jumble of small parts are not! Also, he probably could not care less if they are off a TC, Buick or a dog cart.

A simple list with small sketches beside each item will enable recognition of what are your parts and what are someone else's.

Such as - :

6 small Hex Hd. bolts	4 Long Hex Hd. Bolts
2 Wing Nuts	4 Acorn Nuts
- - - -	- - - -

etc. etc.
Total 42 Items

Include a copy with your parts and keep yourself a copy.

Another advantage of an inventory is that when advised that your job is complete and is ready for you to pick it up, is to take along a similar container and stand there and transfer your parts from one to the other marking them off as you go.

Parts can become detached in the baths - some baths are agitated. Steel items can be recovered from the bottom of the tanks with a magnet – but non ferrous items are a different story.

Doing this enables you to immediately point out that a part is missing, e.g. "there should be two more brackets like this one."

A search can be carried out then and there – far better than you ringing up in two weeks time and trying to ex[plain what is missing - you could be lucky, but quite often it is too late, your irreplaceable part has gone to someone else.

The converse also applies, you night have someone else's precious part.

Please do not take the above as a slur on the industry, but a fact of life – things do happen. By taking these small steps, not only are you helping yourself, but also the plating firm, they want things to run as smoothly as possible.

In Parts 2 & 3, with the Editor's permission, (**Granted! Ed**) I will explain some further steps that you can take to make the job easier all round, and achieve a good result.

“Tour de Silverstone” 2009

The 2009 'Tour de Silverstone' builds on the successful introduction of a Road Run to the programme for the first time at the 'Silverstone International' weekend in July 2008.

Encouraged by the response to last year’s event, the organisers felt that a further Tour should be run again this year, with the objective of it becoming a permanent fixture to the newly entitled **MGLive!** weekend of activities.

This year a different format has been adopted, with the Tour having 4 start points, roughly North, South, East & West of the circuit at Silverstone. This means that the participants of the Tour will be able to travel a shorter distance from their homes to the start venue and then complete the journey to Silverstone, by way of the Tour.

Motor (or closely related) museums have been chosen for the start venues and the participants will have time to visit the museum before commencing the run. The entrance fee to the museum is included in the cost of the Tour.

As before, the route winds its way through attractive countryside and delightful villages, using primarily unclassified roads, with each route totalling approximately 80 – 100 miles. Bearing this in mind, it is anticipated that the Tour will take some 3 – 4 hours to complete, with a scheduled arrival at Silverstone around 4.00pm. To round off the afternoon, tourists will then be able to drive 2 parade laps on the famous International Circuit.

Entry to the Tour will be by advance booking only, and further detailed information of the runs and times, dates, costs and application form can be obtained by visiting www.mgcc.co.uk/events/tourdesilversone **Paul Plummer**

MPJG Engine Bolts, Studs and Pipe Fittings. (Measurements taken from MPJG engine number 1025)

Front mounting plate to block……Nine used…….M8x1 bolt, length 20mm. 4mm unthreaded. Head size 5/16 BSF.

Flywheel casing to block……Eleven used…….M8x1 bolt, length 20mm. 6mm unthreaded. Head thickness reduced to 4mm. Head size 5/16 BSF.

Block to flywheel casing…….Two used…….M8x1 bolt, length 46mm. 28mm unthreaded. Head size 5/16 BSF.

Clutch cover to flywheel…… …Six used……...M8x1bolt, length 22mm. 5mm unthreaded. Head size ¼ BSF.

Clutch housing (bell housing) to flywheel housing…Eight used……M10x1.5 bolt, length 28mm. 10mm unthreaded. Head size 3/8 BSF.

Sump oil pick up pipe to block…… Two used…… ...M6x1 bolt, length 38mm. 28mm unthreaded

Sump to block……Twelve used:-

Ten…… M8x1 bolt, length 26.5mm. 12mm. unthreaded. Head size 5/16 BSF.

Two ……M8x1 bolt, length 30mm 12mm. unthreaded Head depth 8mm, Head size 5/16 BSF with screwdriver slot.

Block to sump…….Four used……. M8x1 bolt, length 26.5mm.12mm.unthreaded. Head size 5/16 BSF.

Flywheel to crankshaft……

Tappet Guides to block……..Four used…….M10x1.5 bolt, length 45mm. 24mm unthreaded. Head thickness 8.5mm. Head size 3/8BSF.

Oil gallery plugs…….Three used……..M8x1setscrew, length 8.5mm. Head size ¼ BSF.

Camshaft bearing locking screw…….Two used…….M8x1setscrew, length 16mm. Head size ¼ BSF Spigot at end 4mm long.

Dynamo bracket to block upper…….One used…… … M8x1 bolt, length 15mm. 4mm unthreaded. Head size 5/16 BSF.

Dynamo bracket to block lower…….One used……. M8x1 bolt, length 12.mm. 4mm unthreaded. Head size 5/16 BSF.

Dynamo front to engine front plate.. . One used …….. .M 8x1bolt, length 25mm. 12 mm unthreaded. Head size 5/16 BSF.

Dynamo rear to bracket…….One used…….. M8x1 bolt, length 28mm. 15mm unthreaded. Head size 5/16 BSF.

Dynamo position arm to block…….. One used…….M10x1.5 bolt, length 38mm. 18mm unthreaded. Head size 3/8 BSF. (Note spacer 20mm)

Dynamo position arm to dynamo… One used…….1/4 BSW setscrew, length 16mm. Head size 3/8 BSF.

Starter motor to flywheel casing…… Two used …….M10x1.5 bolt, length 33mm. 10mm unthreaded. Head size 3/8BSF.

Starter motor to flywheel casing…….One used……..M10x1.5 bolt, length 28mm. 10mm unthreaded. Head size 3/8BSF.

Cam gear retaining bolt……..One used……..M12x1.5 bolt, length 19mm. 3mm unthreaded Head size 7/16 BSF.

Timing Chain Cover, eleven used:

cover to front mounting plate……...Five used…….M8x1 bolt, length 13mm. 5mm unthreaded. Head size 5/16 BSF.

cover through front mounting plate. Three used……..M8x1 bolt, length 15mm. 5mm unthreaded. Head size 5/16 BSF. (Nuts used)

cover through to block…….Three used…. ... M8x1 bolt, length 20mm. 5mm unthreaded. Head size 5/16 BSF.

Bell housing to Gearbox…….Eight used…….. M8x1 bolt, length 28mm. 10mm unthreaded. Head size 5/16 BSF.

Oil pump to block…….Eight used……. M6 x1. All have 20mm of thread and 3/16WW (1/4 BSF) heads. Two of 76mm overall length. Two of 72mm overall length. Four of 59mm overall length.

Oil filter bracket to block……. Two used…….M6x1 bolt, length 55mm. 40mm unthreaded. Head size 5/16 BSF

Oil pipe to oil pump ……. Two used…….M6x1 bolt, length 18mm. 6mm unthreaded. Head size ¼ BSF

Rocker pedestal to head……...Eight used…….. M8x1, length 73mm. 60mm unthreaded. Head size 5/16 BSF

Breather pipe securing clamp…..…...One used……. M8x1, length 38mm, 25mm unthreaded. Head size 5/16 BSF.

Water bypass union to thermostat housing. Two used…2BA. length 14mm. Cheese Head.

Fan to water pump pulley bolts……..Four used…….M5x0.75, length 38mm, 24mm unthreaded. Head size 3/16 BSF.

Stud tappet cover……Two used . M8x1, length 68mm, thread block end15mm, outer thread 26mm.

Stud cylinder head……..Four used…….. . M10x1.5, length 110mm, thread block end 20mm, thread nut end 26mm.

Stud cylinder head……..Seven used……. M10x1.5, length 122mm, thread block end 20mm, thread nut end 26mm.

Stud rocker cover to block……..Two used…….... M8x1, length 118mm, thread head end 13mm, thread cover end 26mm.

Stud head to water pump…….One used ……..... M8x1, length 66mm, thread head end 15mm, thread nut end 13mm.

Stud head to water pump…….Three used…….. M8x1, length 38mm, thread head end 15mm, thread nut end 13mm.

Stud head to water manifold…….. Two used……..... M8x1, length 50mm, thread head end 15mm, thread nut end 13mm.

Stud head to water manifold……...Two used…….... M8x1, length 32mm, thread head end 15mm, thread nut end 13mm.

Stud water pump to thermostat housing…Two used . M8x1, length 28mm, thread thermostat end 13mm, thread water pump end 14mm.

Stud exhaust manifold to head…….Eight used……. M8x1, length 42 mm, thread head end 15mm thread nut end 17mm.

Stud inlet manifold to carb……. Four used……. M10x1.5, length 36mm, thread each end 13mm.

Fittings 1/8BSP.

Block water tap. Oil feed block to head, both ends. Oil pressure feed pipe block end.

Please send any errors or omissions, to robbut(at)onetel.com

Robert F. Butson, December 2008.

Ed's note: Thanks Bob for a very useful list. There are a number of TAs being rebuilt at present, albeit some are using XPAG engines, and owners with the original MPJG engine fitted will find the list to be a helpful point of reference.

Phil Ball of 251 Services can supply a good selection of the nuts, bolts and setscrews on the list. He can be contacted on 0870 7664251. The e-mail address is sales(at)251services.co.uk I have a pdf copy of his list (which includes some XPAG items) which I'll gladly forward on request (see p. 38).

Competition: Can you identify this part?

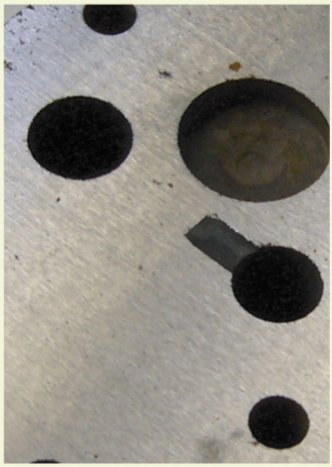
Win a £50 voucher to spend at Peter Edney Classic and Sports Cars

Identify the part of the T-Type MG shown in the picture to win a £50 voucher to spend on parts or services at Peter Edney Classic and Sports Cars

All correct answers submitted will be placed in a hat and a winner drawn.

Please write your answers to:
Peter Edney Classic and Sports Cars
Unit 2, Woodside, High Easter Road,
Leaden Roding, Dunmow,
Essex CM6 1QQ,

or Email: info@peteredney.co.uk



Brake Drums for TDs A number of TD owners have contacted me about the possibility of having new brake drums manufactured. It might be possible to arrange this on a non-profit making basis. If you are interested please contact the Editor (details on page 38).

QUESTIONS TO AND ANSWERS FROM THE TD/TF TECHNICAL SPECIALIST

Barrie Jones, the Register TD/TF Technical Specialist kindly keeps me informed of requests for technical advice received by him and the answers he supplies. For quite a period of time there was a dearth of requests, but it has been busier of late and there is now sufficient material to publish.

Question *I am a member of MGCC North Centre here in Pretoria South Africa for the past 20 odd years. As a previous owner of a beautiful TD I am trying to help a couple of our new members who have TDs today. A few years ago, possibly more like 15 years ago, I saw a set of drawings, possibly in the* ***"Safety Fast!"*** *magazine, showing how to convert an ordinary dynamo into one which will take the rev-counter drive as on the TD. A fair amount of machining was needed. I am trying to get a set of these drawings as to find an original TD dynamo in South Africa is nearly impossible. Do any of the TD Register members know of these drawings and how I can get a set to pass on to our TD members?*

Answer The TD/TF dynamo is identical to ordinary dynamos of the same age, except the armature has an extension on the tail, and the rear bracket has a threaded extension to mate up with the tacho drive. I have modified several in the past, and I currently use one on my TF which started life on a Mini.

You need to drill the end of a standard armature and tap it with a suitable thread (e.g. 6mm). You can then make up the correct shaped extension with a 6mm thread on the end. Because the dynamo spins clockwise, this extension will be self-tightening.

The rear brackets are not so hard to find. They used the same casting on the Frog-eyed Sprite, and on the Mk 1 Midgets and Mk 2 Sprites.

Question *Can I ask your advice and comment, and possible corrective action on a couple of issues, as follows?*

1. Brakes - Front!

Back last June, I replaced the N/S front wheel bearings (some play in old ones), and at the same time replaced front brake shoes, ***both sides!*** *- new linings (bonded type). Initially experienced some brake grabbing, especially when cold, mainly N/S. Removed drums again and re-chamfered the brake lining leading edges; improvement, but not eliminated.*

Not much mileage done since then (about 500 mls). But, especially during the recent cold weather period, I have still experienced grabbing front brakes (but more "even" pull) at initial start off. OK after short distance and

a couple of "stabs" at the pedal. Anything I should do about this, or is it a question of linings needing to bed in more, and then re-adjustment?

2. Dynamo Charging and Voltage Regulation

Probably because the TD had been standing (garaged, covered, but not heated) during the recent cold spell, I found that on starting up and planning a run just recently, I was getting No Dynamo Charge indicated on the ammeter. After a bit of detective diagnostics, I traced this back to a sticking dynamo brush! No commutator contact! Dynamo dismantled, cleaned and brushes rechecked. Tested. All OK. Also took the opportunity to check over the Regulator and Cut Out. It's the original, and probably not been touched since installed at Factory! The points clearances were well out of tolerances, and dirty! Removed, cleaned, all gaps and clearances reset correctly as per Workshop Manual (and your "Notes"). Now all working again - but I feel the voltages for cut out and regulator need to be checked. Should a correctly set regulator be able to "hold its own" (i.e. maintain at least zero, or small positive charge) when loaded with the "standard" auxiliaries (e.g. headlamp full beam; driving lights, wiper etc.), assuming the battery is up to full charge, and engine running at moderate - 2500 - 3000 rpm?.(This is not currently happening, even after a good 25 mile run to charge the battery. I'm showing about 6-8 amps discharge under the above load conditions). Or is that too much even for a poor 17 amp output dynamo?

Also, is it feasible to check all the voltages with an Electronic Digital Voltmeter - or should one stick with the older Moving Coil type? (Digital meters seem to "flick" occasionally regardless).

Answer New brake linings will bed in over the first 500 miles or so, but they shouldn't grab. They usually need adjusting as they bed in. Modern non-asbestos linings seem to be inferior to the old ones, they wear the drums much quicker, some squeal and I would not be surprised if there are other side effects such as grabbing. One small point, if they pull to the left, then the problem is usually on the right side, and vice versa.

As regards your control box, the mechanical settings are just a starting point. You may well have made the situation worse by adjusting them. The only way to set them accurately is with an analogue voltmeter. You cannot see which way a digital meter flicks, the numbers just change.

You have adjusted the cut-in voltage, so maybe you have set it wrongly, which might explain your symptoms. However...the ammeter only shows whether you are taking current out of the battery, or whether the dynamo is putting current in. Unfortunately, the RB106 regulator monitors the battery voltage, not the current. If you have a fully charged battery, then it is quite common to see a current discharge because the regulator only knows that

the battery is up to voltage and assumes from this that topping up is not required.

Question *If you allow me, I kindly ask you to share with me any knowledge you would have in fitting safety/ seat belts to our car. We're planning a trip to southern France in 2010, and the belts will be high on my priority list.*

Answer Fitting seat belts to a TD or TF is a topic that is often debated. The biggest problem is finding somewhere sufficiently strong to take the bolts. Personally I do not think that the wooden tub of a TF is strong enough to take them. Also, you would have to position the rear mounting point high enough to run the belt over your shoulder without pulling down too sharply. That sounds like a roll-over bar to me.

See this thread:
http://www.british-cars.net/mgtd-mgtf1500-bbs/seat-belt-installation-2008051401061322605.htm

Seat belts are safety-critical items, so I do not wish to make any recommendations. I suggest that you find a company that manufactures a kit specifically for the TD/TF. Follow their fitting instructions carefully, and keep a copy of their instructions in the car in case you are challenged.

Tron Ellefsen from Norway who asked the question about fitting seat belts is pictured here with his TF1500 (TF7491) in North Yorkshire. The Goathland Hotel is better known both locally and internationally as the 'AIDENSFIELD ARMS' in Yorkshire Television's very popular and long running drama series 'HEARTBEAT'.

Question *I have been trying to find a supplier of heat shields for my TF1500 (1 ½" SUs) to cure fuel vaporisation. At today's (Stoneleigh) Show Brian Rainbow suggested that you might be able to help or might know a man who could.*

Answer I made one for my TF1500 some years ago and since fitting it I have never had any vaporisation problems. I can make one for you, but it will take a week or so before I can get around to it. Price will be £12 including UK postage.

Question *I need to fit new outer oil seals to the rear axle on a 1953 TF. It is fitted with wire wheels and so I'll need to remove the wire wheel hubs, can you advise if there is a nut holding the hub splines on to the half shaft? - if so are they right or left threads? Also do I need to remove the half shafts to replace the oil seals?*

Answer The TF half shaft has a normal right-hand-threaded nut retaining the wire wheel hub adaptor. Each adaptor has 2 holes in the side for access to the split pin. Once the nut is undone the hub should come off with the drum still attached to it. I prefer to completely undo the brake shoe adjuster so that the drum comes off easily.

To get at the seal you have to remove the rear brake backplate before you can remove the seal carrier. It is possible to fit a new seal in situ, but not recommended. Remove the split tapered collar on the half-shaft and clean it thoroughly, especially where the seal runs on it. If it is badly pitted or ridged, the collar from the tubed axle on an MGB is identical. Make sure everything is degreased, dry and clean before reassembly, and just wipe a smear of grease around the collar where the seal will run.

When re-fitting the hub, make sure the split pin hole in the half shaft lines up with the access holes in the hub adaptor.

On re-assembly it is vital that the hub nut is done up really tight. I recommend that you tighten it to a minimum of 150 ft-lb. If you have to loosen it a bit in order to line up a split pin hole, then I prefer to make the washer under the nut a bit thinner by rubbing it on some emery cloth. Keep doing this until you can just reach the next hole.

Don't forget to re-adjust the brake shoes when you have finished.

THE FILKINS CLASSIC CAR SHOW AND VILLAGE GARDENS OPEN DAY

TC owner, Chris Bristow and his good lady, organisers of this wonderful event, would like more T-Types to come along and enjoy the fun on **14th June.** The twin villages of Filkins and Broughton Poggs are situated five miles south of Burford, Oxfordshire and three miles north of Lechlade-on-Thames, just off the A361. The website of the twin villages is www.filkins.org.uk

The previous event attracted no less than 115 cars, including a 1909 Chenard. This is a non-commercial Show and you do not have to pay an entry fee. There is free tea and coffee all day and a Barbeque is available at reasonable cost. Chris will be there with his TC as will Register Historian, Roy Miller with his TF1500 and your Editor hopes to be there with his PB. Forget the stresses and strains of the credit crunch and quantitative easing and come along for a good day out to Filkins, recent winner of the title of the friendliest village in England.

DOUG PELTON – PROPRIETOR OF "FROM THE FRAME UP"

Doug is well known to our North American readers as both a supplier of quality T-Type spares and a frequent contributor to the tabc list. Doug has also written some very useful articles for TTT and there are more "waiting in the wings". From a modest debut, starting with his pedal spring sets, Doug has built up an impressive catalogue of parts. One thing you can be sure of – Doug does painstaking research to get things right – a rare commodity these days!

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Ed's Note: The full Committee will be published in the May issue of TTT following the Register's AGM, which takes place on 14th March after the 'Rebuild' event. Some members are not standing for re-election but will retain their portfolio outside of the Committee. One of these is Roy Miller who has helped so many owners with DVLA matters and who, I am pleased to say, is prepared to carry on with this valuable service.

My own contact details are as follows: e-mail jj(at)octagon.fsbusiness.co.uk substitute @ for 'at'. Phone 0117 986 4224. Postal address: 85 Bath Road, Keynsham, BRISTOL BS31 1SR

……and finally!

Neil Sharpe spotted this sign whilst on a recent holiday in Costa Rica. Says Neil "It was on the gatepost of a country property near San Ramon, and is obviously intended as a security deterrent, but who the company is I have no idea, nor whether or not the company is in any way connected to the Car Club. If there is a Spanish speaker on your mailing list who would care to give the phone number a call, we might get an interesting reply. Costa Rica country code is 00 506, if anyone cares to try". **Ed's Note:** For "cares" read "dares"?

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