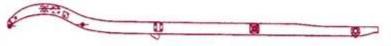




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## THE EDITOR John James

Welcome to Issue 17 (April 2013)!

I'd like to thank all of you who visited the stand at Stoneleigh (MG Spares Day) on 17<sup>th</sup> February. It was a very successful day and it was good to 'fly the flag'. What flag? - Well.... perhaps we'll have one for next year's event!

The generosity of T-Typers who make donations never ceases to amaze me. My first visitor to the stand (which was before the Show officially opened) was a gentleman from Switzerland, who gave me £50. This was followed by a donor with a Building Society cheque for £50 and yet another cash donation of £50. Also donated was a new pair of bushed top leafs for TC front springs and a brand new set of (black) carpets for a TF. These are advertised in the covering e-mail which is sent to the 2565 subscribers who have registered to be notified whenever a new issue of TTT 2 is launched.

The photo shows 'yours truly' with Brian Rainbow (left) taking a breather from setting up the stand.

of the Isle of Wight in September 2014 - feels a long way off but with time seemingly on wheels it will soon come round! Rob Dunsterville has asked me to mention the 5th biennial National Weekend Rally of the Pre-War

Expressions of interest are coming in for the Tour

MG Register of Australia which is set for 25-27 October 2013 in the historic city of Bathurst - 200 kms West of Sydney. With only 350 MGs built before 1940 spread across Australia, which is an area larger than all Europe, the Register is proud that participants with 70+ year old cars make the effort to drive long distances to attend and enjoy interaction social and camaraderie.

Rob sent a great deal of background information about the Rally which I'll use to preview the event in the June issue.

Those of you who receive the covering e-mail mentioned previously will have noted that we have arranged a discount for our UK readers with Hagerty Insurance. To qualify for this offer, please call Hagerty on 0844-824-1130 and quote the promotional code **CCTTT**.

By all means feel free to test the market but I have found Hagerty to be very competitive with quotes and I value their service excellence.

The mention of the Pre-War Rally in Australia has reminded me to 'give a plug' to the third Pre-War Prescott Garden Party on Saturday 20th July. Prescott Speed Hill Climb, home of the Bugatti Owners' Club is set in alorious Gloucestershire countryside and is well worth a visit. There are a number of attractions this year, including a noreserve auction of donated spares and automobilia organised by

Hereford Vintage Auctions during the lunch break and also a display by aircraft from the RAF Battle of Britain Memorial Flight. The event is open to all Edwardian, Vintage and thirties cars. For further details go to www.prewarprescott.com

Simon Clay has contacted me about TC9581 (KKD 600) which was his father's first car while he was a midshipman in the Royal Navy at Dartmouth College in the early 60s. Simon would dearly like to talk to the present owner. If s/he reads this please e-mail me via the website contact form.

Finally, I dedicate this Issue to my brother, Eric, who died on 1<sup>st</sup> February from pancreatic cancer.

I had on sale at the Show some of the newly manufactured Nylatron interleaf pads for the rear springs on the TD & TF. Details of these are given under the 'Bits and Pieces' section of the magazine.

Planning for the Tour of Rutland in September is progressing and we now have a sponsor for the rally plates. It looks as though we will have 40 cars on the Tour. Still to be confirmed is the entry fee and we are trying to keep it down to £20. I have set myself a target date of June to send out a 'round robin' to participants.

#### MG TA Cylinder Head by Brian Rainbow

One of the most common problems with the MG TA (MPJG) engine is the sudden appearance of oil in the cooling system. This is not a drastic problem until the amount of oil becomes excessive. I have been running my TA with just such a problem for the past three years, and have covered around 10K miles during this time. Fortunately it is only oil in the water, not water in the oil, this condition is far more serious! The most likely cause of oil in the water is that the cylinder head has developed a crack, usually around the siamesed exhaust port area on cylinders 2 and 3. This part of the cylinder head gets extremely hot, and as a consequence is very prone to cracking, probably made worse by the higher burn temperatures of modern fuels. Have a look at photo 1 to see where this particular head had cracked, also note that there is no paint left on the centre exhaust port, it is all burnt off. This head had cracked before and had been repaired about 15 years ago.



Photo 1 showing the crack – the second time this particular head had developed a crack.

The MPJG engine has a non-pressurised cooling system, and due to the design of the rocker gear has an abundance of oil at the top of the engine, just lying in pools below the rocker shaft before flowing back down to the sump. This oil gets sucked into the cooling system and eventually ends up floating on top of the water in the radiator. I regularly clean out the gunge from the top of the rad, and a couple of times a year drain out the coolant and refill with fresh water. I am told that putting a dishwasher tablet in the rad for a couple of days before draining helps to clear out the rubbish, but I have not tried that yet!

I decided this Winter I would solve my problem by replacing the cylinder head with one of my spare heads. So I selected one of the three spare cylinder heads that I have, stripped it down and took it across to my local engine repair shop, Knight Engine Services, run by Dave Knight, for testing. He very quickly cleaned it and thought he could see a crack, which after a quick dose of Ardrox soon proved that it was quite badly cracked, see photo 2. I quickly beat a retreat, embarrassed that I had not spotted it!



Photo 2 shows the crack in one of Brian's spare cylinder heads

A couple of days later I returned to see Dave with another of my spare heads, this time cleaned and checked thoroughly by me.

The plan of attack by Dave was as follows:

- (1) Thoroughly clean the head in a 'hot bath' to remove all dirt and grease to get to clean metal.
- (2) Pressure test the cylinder head whilst submerged in water to ensure there are no cracks.
- (3) Bore out the existing valve guides and insert K-Line phosphor bronze guide inserts, and ream the inserts to the correct size for the new inlet and exhaust valves.
- (4) Machine and fit 4 new exhaust valve seats with shallow unleaded valve seat inserts.
- (5) Repeat the pressure test as in step 2 to ensure that the head does still not leak.
- (6) Re-cut any of the valve seats necessary to suit the new valves.
- (7) Skim the cylinder head a minimal amount to ensure it is completely flat.
- (8) Skim the manifold faces to ensure that they are flat.

I had supplied Dave with a new set of valves, but the final lapping in of the valves, re-assembling the head and painting etc. would be done by me. I had a new set of standard valve guides, but after a chat with Dave he recommended that we use the K-Line guide inserts rather than press out the old guides and press new ones in. This would be less traumatic to the cylinder head particularly on the area around the valves for cylinders 2 and 3.

So how did it go? The head was thoroughly cleaned and then put into the receptacle to be pressure tested (see photo 3). Plates are attached to the underside and each end of the head, an airline is attached to one end plate and then it is submerged under water. Air is pumped into the cylinder head up to about 25 psi, and then one looks for bubbles! We had no bubbles and the head retained the pressure, so everything was OK with this cylinder head, thank goodness.

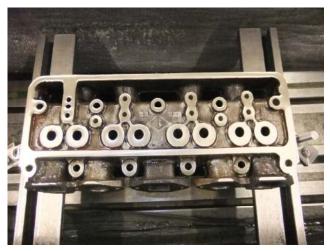


Photo 3 showing the head about to be pressure tested.

The next step was to fit the K-Line phosphor bronze guide inserts, so the old valve guides were bored out to accept the new inserts and they are then pressed in (see photo 4). Unfortunately this did not go to plan, with the first two inserts breaking whilst being inserted. So plan B was put into action, the K-Line inserts were abandoned and the old guides were pressed out hydraulically. The new set of standard valve guides were then hydraulically pressed into place (see photo 5). Fortunately this time it all went well. By the way you must always press out, and press in new guides, NOT use a punch and big hammer as the shock will probably crack the head!



Photo 4 shows the K-Line phosphor bronze guide inserts ready to be pressed in .....except that this was not a success

With the new guides in place work could then commence on fitting the new shallow hardened exhaust valves seats needed for un-leaded petrol. The old seats were machined out and the new seat inserts were pressed into place. We used shallow seats as we did not want to inadvertently cut into a waterway and ruin another precious cylinder head. With the new exhaust valve seats in place the head was then pressure tested for a second time, again everything was fine. The new seats were then cut to ensure they suited the new

exhaust valves I had supplied, and the inlet seats were given a quick cut also.



Photo 5 shows the new set of standard valve guides ready to be hydraulically pressed in.

The final tasks were to skim the face of the cylinder head a minimal amount to ensure that it was perfectly flat. The manifold faces were also skimmed to ensure that they were flat, as they do distort, particularly the centre exhaust port. Once this had been done the head was pressure tested for a third time (again OK) before being dried off and painted with red oxide paint (see photo 6). The standard thickness of an MPJG cylinder head was 3.469 inches, this head is now down to 3.440 inches being skimmed 29 thou. I intend to paint the inner oil facing surfaces of the head with Glyptal paint, this is a very hard paint, impervious to oil and fuel, and that also seals any porosity and improves oil flow back to the sump. The only downside is that it is expensive paint! Dave had done a fantastic job for me, now it remains to be re-assembled and fitted onto my TA engine in the car.



Photo 6 shows skimmed and pressure tested (for the third time!) head

Knight Engine Services can undertake full engine re-conditioning and their address is: New Factory Unit, Furnace Lane, Nether Heyford, Northants, NN7 3LB, tel. 01327-340900. They are about 3 miles from Junction 16 of the M1, and about 3 miles south of Weedon just off the A5.

#### Front Cover 'Restoring your Youth'

Sexagenarian, Jim Gibson, from New South Wales tells us about finding a T-Type to restore, similar to one he owned in his late teens when he had a full head of hair, Chubby Checker was dancing the Twist and the Beatles visited Australia.

Words and photos by Jim Gibson (and a little light editing by John James).

It was May 2008 and the car was on eBay – and as the saying goes a 'picture says 1000 words'. The four photos of the TD didn't do it justice, and therefore the starting price was more than it looked to be worth, but I took a gamble after talking to the seller – and won it with my lonely bid – the car sight unseen in the flesh. Bu\*\*er, what had I done!

My wife was as keen – if not keener than I – to see the little car and to make it our hobby restoring it and enjoying the pleasures of 'flies in the teeth – wind in the hair' freedom, this little classic piece of motoring history and the memories of our past would offer us. It's a step back in time, from the boring and bland sameness of today's cars.

We hired and hooked up a car trailer, heading for the Central West of NSW where the MG had been sitting for a dozen years or more. It was in an old tin shed and as the owner opened the door it was almost the moment of truth, and then it came.

He removed the dusty old bedspread that was keeping it warm – my wife and I, not game to look at each other, couldn't believe our eyes – it wasn't a basket case like the photos had led us to believe, she was beautiful! The body and woodwork were in great condition, the seats, the hood and the side curtains, as well as the tonneau cover were all good, but the carpets were knackered.

The battery was flat, which annoyed the seller, as he wanted to start it up for us to drive onto the trailer. I wasn't too worried about the mechanicals, as I'd been a mechanic in my earlier working days and well used to fettling cars and trucks of this era. My wife couldn't get the cash out of her handbag and into the seller's hands quick enough. After a handshake and well wishes from him, we loaded up and headed home with our little treasure.

#### The renaissance

Well it didn't take long before I was on first name terms with the guys at Sydney's Heritage MG, who'd issued me with the T-Type restorer's 'bible' – a Moss Motors catalogue; all the reproduction parts I would need to get the TD back on the road.

She was advertised as being a 1950 model, but when I checked the engine and chassis numbers with the T-Register production records, it turned out she was born on 6 November 1951.



Photo 1 showing the Factory Production Record plate made up by Jim.

My first TD from 40-years prior was a red 1953 model. I remember clearly fitting a new set of Pirelli Cinturatos to it one Saturday morning at Spencer's Rubber Works in the Sydney suburb of Hurstville, and enjoying the grip of those Italian bred radials for the first time as I negotiated the 'old' Sydney to Gosford road with its challengingly tight, opening and closing corners, with hood down and the cadence of the TD's induction system in my ears as it gulped the cold night air, on that Saturday evening so long ago.

Indignantly our 'new' TD was now up in the air on jack-stands in the garage, bonnet off, grille and radiator out, interior stripped, wheels off and brakes removed to the bare backing-plates.

It hadn't been registered since 1995 and apart from the dozen or more years in the Central West it had been an exhibit in a car museum at the Thunderbird Garden Inn Motel in country NSW at Tamworth prior to that, from where the previous owner had bought it. Oddly enough - it must be fate - but I remember staying at that same motel in the early nineties and strolling over to look at the cars in the museum before an evening meal. I remember the TD well, as you don't see that many in a stark white hue.

After all those years without use, the wheel cylinders were seized solid and it was impossible to remove the pistons, the master cylinder was also in a state of permanent rest. The brake pipes were badly corroded and loosening them with a box spanner only wrung the neck of the pipes. The brake linings were good and of a soft bonded material needed to stop a non-servo assisted fifties sports car, so they remained and the standard diameter glazed drums got a light skim.

The cooling system was in a similar sorry state of corrosion, as were many other components that had lain dormant for so long. So water pump, hoses and branch pipes were renewed and the radiator cleaned.

My wife and partner-in-crime Jill, was busy with the Autosol, cleaning brass plates and shining the SUs and their alloy induction system. And there was

more bright-work to clean; as the car had been on display a lot of the components had been chromed, giving her more of a challenge with the polishing cloth.

The really good news was I had once again found a use for my Whitworth spanners and socket collection. My son who is also a motor mechanic by trade, had said to me many times over the years, 'Dad what are you keeping these Whitworth spanners for?' Well Jeff this is why — I thought to myself.

It was like Christmas each time I visited Heritage MG with another list of reproduction parts to collect for the TD, even to the point of over exercising the Visa card.

MG aficionado and MG Magnette racer Bruce Smith from North Sydney's Sportsparts, was also very helpful – his plethora of knowledge about MGs – priceless.

I replaced the low and high-tension ignition components. I also managed to find and fit a brand new original rubber case battery with external lead cell connectors, from the period – it filled the battery space with panache. I'd forgotten just how heavy these old style batteries were.

With the engine, gearbox and diff oils replaced with Penrite, holding my breath I turned the key; the electric fuel pump clicked over filling the float bowls, I pulled the starter button and after several revolutions the engine started - the SUs scavenging the air as it rushed down the throats, teasing the petrol from the jets as it guickened its pace through the venturis and past the butterflies into the combustion chambers, to be ignited by the new spark plugs as the pistons compressed the mixture - breathing life once more into the TD's then 58-year-old engine. The Penrite pushed though the galleries and the oil pressure dial registered 50psi in a heartbeat – the ampere meter was on the positive side and the water temp gauge climbed as the engine warmed up, even the tacho worked! Of course like all British cars fitted with Jaeger gauges the clock failed to strike a blow stopped short never to go again.

The tyres were Goodyear G8s from another century and suffered radial cracks. New 165-70x15 radials were fitted and the wheels that were a little out of round were balanced. The driveline similarly with a new a tube and unis installed.

The archetypal oil leaks at the timing cover and rear main appeared – a job for another day, when the engine would have to be removed.

There were some imperfections in the non-original paintwork – again a job for another day.

#### On the road again

Nine months had passed, it was February 2009 and it was time to screw on a set of personalised black and white registration plates and hit the road.

Everything worked, clutch (although without any adjustment left), gearshift and not a murmur from the diff, we'd done well from our flippant eBay purchase!

I was a little apprehensive as to how Jill would feel more than forty years down the track, about the ride characteristics and open cockpit motoring in our 'new' MG. I shouldn't have worried, as looking across at her from behind the thin-rimmed Bakelite steering wheel I saw the sparkle in her eyes; the wind tousling her hair was an annoyance, but a trip to the hairdresser for a shorter MG style cut, would soon counteract that problem.

The TD was always my favourite T-Type, with its classic square-rigger look inherited from its forbear the TC, but with more room and independent front suspension and rack and pinion steering, as opposed to the more utilitarian ride and less direct steering box control of the TC. The TF in my opinion lost a lot of the T-type character.

We have no intention of ever selling our newfound love – a *ménage a trois*! This little sports car has enabled us to enjoy motoring as it is supposed to be and relive our carefree youth.

But wait there's more................ After a few months the oil leaks from the engine's rear main oil seal and the high engine revs at highway cruise got the better of us. As we were soon to venture on a four hour highway trip to Wagga Wagga with our car club, it was decided to pull the engine and diff.

The engine got a 350 Chevy rear engine oil seal conversion crafted onto the block, new 60 thou oversize pistons – increasing the capacity to just over 1300cc. A mild camshaft grind for better duration, larger valves and unleaded conversion, together with the removal of 1/16<sup>th</sup> off the head, increasing the compression ratio to 8.6:1 and a port clean up.

The 5.125:1 rear axle ratio was changed to 4.55:1 increasing the road speed by 12-km/h at the same engine rpm. Better fuel economy and less engine wear and tear. Highway cruise at 110km/h was now at 4200 rpm.

Our little British sports car now epitomised the MG slogan – 'Safety fast!'



Photo 2 showing engine and diff pulled (and Jim's personalised number plate).

# MG TD replacement rear suspension bushes using modern polyurethane components.

Polyurethane suspension bushes are readily available nowadays and are a useful replacement for the original rubber type that can, and do, deteriorate with age exacerbated by exposure to oil and grease (see photo 1)



Photo 1- The old rubber bushes removed from the author's TD showing their (considerable) signs of wear.

I decided to fit polyurethane replacement bushes at the rear of my TD as the shackle bushes (and rubber spring pads) had not been replaced during my original rebuild back in 1992, and had obviously been installed long before then.

I obtained the rear poly bush kit that comprises of eight shackle bushes and four leaf spring pads. I did investigate replacing the leaf spring front "silentbloc" bush but as I discovered this front bush has a steel insert (AAA629) and is not readily available as a polyurethane replacement. I also learnt that this bush is very hard wearing and not usually in need of replacement, unless it is showing serious signs of wear. As the silentbloc bushes looked in an acceptably good condition I left them unchanged for the time being.

Before I go any further I should issue the necessary "health warning"; springs are a taught bundle of energy and must be treated with due respect.

With the new polyurethane components at hand it is time to start looking at the dismantling process necessary to remove the bushes from the spring rear hangers.

The first thing to note is that the TD rear wing trailing edge is in very close proximity to the spring hanger, and indeed makes it difficult to attach the necessary spanners etc. without damaging the wing paintwork. In order to reduce this threat, I removed the lower three wing fixing bolts, and with the lower wing now free, gently forced in some soft padding, between the wing and the body, to hold the wing well out of the way.



Photo 2 illustrating the limited space in which to work due to the proximity of the rear wing trailing edge to the spring hanger. Also visible is the wear on the rubber bushes in the spring 'eye' and a spring interleaf pad with its 'dowel' located in the spring leaf.

The rear of the car was jacked up and two axle stands were positioned, one on each side of the end rails of the main chassis members.

A hydraulic jack was now positioned under the differential, on a piece of wood, to be able to raise and lower the axle to take the pressure off the (unloaded) rear springs as necessary. Two "G" clamps were positioned on the leaf springs — one each side of the U bolt clamping plate - to keep the spring "together". After setting up the chassis for spring removal I found it best to tackle one side at a time, this way you always have a reference of how things should look.

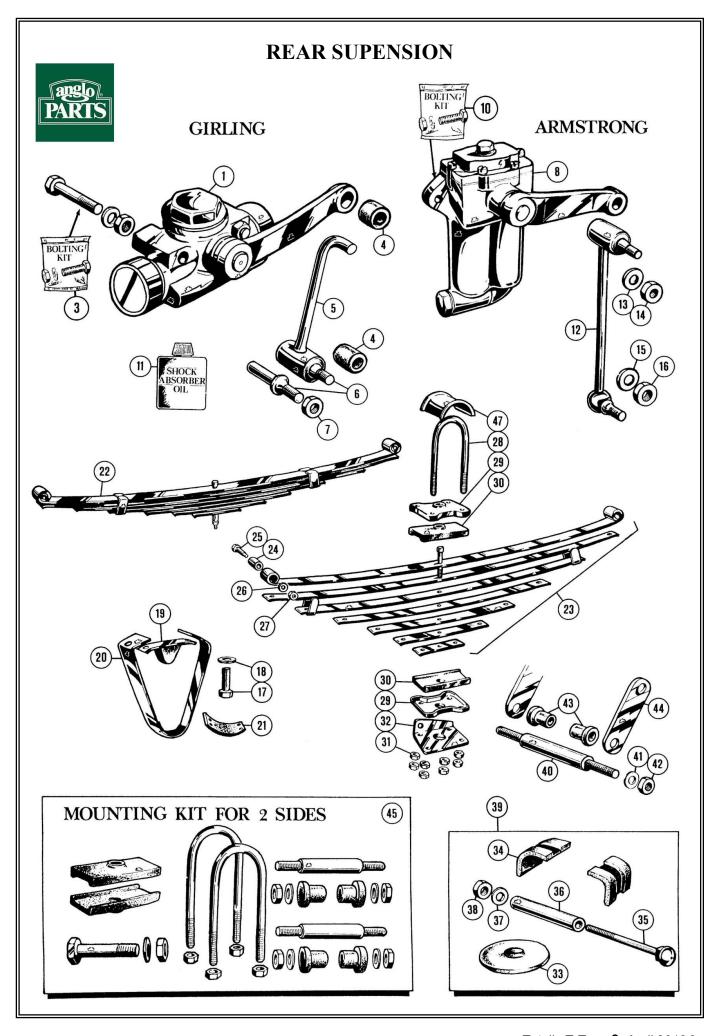
#### Dismantling and Re-assembly (see drawing)

With the rear of the car off the ground and the spring "hanging" unloaded, remove the four nuts (31) on the U bolts (28) and gently lift off these bolts.

The nuts hold the bottom bracket (32) that is attached to the shock absorber link locating plate (29) and above this plate is the lower spring locating rubber pad (30).

The bottom bracket is attached to the shock absorber link arm (12), and this needs to be unbolted so that the arm can be moved out of the way to give access to the plates. On re-assembly I also used new polyurethane pads (30) under the spring. Although the old pads did not appear to be badly worn replacement seemed a good idea as I had the new ones at hand and everything unbolted.

The rear shackle pins (40) can now be removed (2 per side) in order to replace the (8) bushes per side. When the nuts have been undone the hanger plates (44) can be removed giving access to the "old" rubber bushes. The old bushes are pushed out and the spring eye cleaned.



Getting the necessary "access" to remove old shackle pins and re-insert new ones is made difficult by the very close proximity of the bottom edge of the rear wing. However the earlier decision, to unbolt part of the rear wing from the body, makes the job possible.

I used new shackle pins (40) on re-assembly as the old pins showed signs of wear. Reassembly is not difficult but silicone grease can help ensure the new silicone bushes are snugly pressed into the chassis eyes and spring rear eyes.

The jack, under the axle, can be of help to locate the position of the spring and chassis eyes in relation to the plates.

**Note:** The weight of the car should be supported by two axle stands.

It is also necessary to keep the lower part of the rear wing right out of the way during the shackle pin re-fitting otherwise wing paint damage can occur.

When the plates have been aligned, and shackle pins fitted, through both the upper and lower bushes, the washers and nuts (42) can be added.

The photo shows the new polyurethane bushes pressed into the upper chassis bracket (left) and the spring eye (right).



Photo 3 showing the new polyurethane bushes now fitted.

During the process of re-fitting the U bolts (28) I happened to noticed that the underside of these U bolts showed considerable signs of wear where they come into contact with the axle casting. On further examination I noticed the U bolts had also caused some rubbing on the top of the axle casing. MG parts suppliers now offer a solution to limit this wear that was fitted to the MGA as standard. This solution is a wrap around metal plate (47) that fits under the U bolts (see photo 4)

With all the new parts fitted, and the nuts appropriately tightened up, the wheels are re-fitted so that the axle stands can be removed and the car allowed to settle down on its new bushes.

#### Jonathan Goddard



Photo 4 showing the wrap around metal plate which helps prevent axle tube/U-bolt wear.

Editor's Note: I am indebted to Anglo Parts Graphic Department e-mail: <a href="mailto:info@anglodesign.be">info@anglodesign.be</a> - <a href="mailto:mark@anglodesign.be">mark@anglodesign.be</a> <a href="mailto:https://www.angloparts.com">https://www.angloparts.com</a> for permission to use the TD/TF rear suspension drawing from their catalogue. Anglo Parts can supply all the items listed in Jonathan's article.

The Editor can also supply new MADE IN ENGLAND shackle pins in EN19T for the TD/TF (and YA/YB/YT) rear (same pin fits the TC front) and black poly bushes, specially made exactly as the original rubber ones (I own the mould); also polyurethane rear spring pads ('saddles') and interleaf spring pads made from Nylatron.

#### **DISCLAIMER BY THE EDITOR**

'Totally T-Type 2' is produced *totally* on a voluntary basis and is available on the website <a href="https://www.ttypes.org">www.ttypes.org</a> on a *totally* FREE basis. Its primary purpose is to help T-Type owners through articles of a technical nature and point them in the direction of recommended service and spares suppliers.

Articles are published in good faith but neither I nor the authors can accept responsibility or legal liability and in respect of contents, liability is expressly disclaimed.

Before doing anything that could affect the safety of your car seek professional advice.

**JOHN JAMES, EDITOR TTT 2** 

#### NTG Motor Services Ltd – a Short History - by Mike Green



In the late summer of 1966 Barry Naunton, Clive Tanner and myself, all T-Type owners were offered a partly dismantled TA in a back garden, which we bought for £15 between the three of us. We took it apart and kept some items for our own cars, then advertised the rest for sale. We began to sell parts quite quickly, and decided that we would use some of the funds to buy any other derelict MGs and use the proceeds to create a part-time business to pay for our hobby and provide a spares service for other enthusiasts.

We bought various MG wrecks which would most likely otherwise to have ended up as scrap metal, including a VA and a J2 but finally settled on T and Y-types only as this was our real centre of interest. We were fortunate in finding a local farm building which could accommodate about 8 cars at a reasonable rent, later extending to a nearby shed containing pig pens (but no pigs) in which customers found it amusing that wings were stored in pens so they could not escape!

When customers started asking for new parts we started a list of new items, mostly mechanical essentials to begin with, but soon followed by chrome, rubber and other cosmetic parts until the list became extensive enough to become a catalogue. In 1969 Clive Tanner moved away

from the district, and sold his share to my brotherin-law, Dick Bird who organised our book keeping and accounting as well as researching and sourcing many new parts to add to our inventory.

In those early years Dick & I both owned YB models, and with the aid of a trailer we travelled around the country buying cars and parts for resale – these were the days of overalls and greasy hands! Later I ran a ZB Varitone again with the use of a trailer for displays and trade stands at various MG events.

Our first catalogue in 1970 was just photocopied, but we soon produced a printed and illustrated version which continues to be developed and refined. In 1974 we launched our MGA & Z-Magnette parts range, also with an illustrated catalogue.

In 1971 Barry Naunton also moved away from lpswich and sold his shares to Dick and I. We became a limited company around 1975 and we remained as directors until 2000 when Dick retired and Paul Banyard became my co-director, Paul having joined the Company in 1986 – younger blood for the 21<sup>st</sup> century!

By 1973 we had produced a number of new items including dashboards, running boards, TA-TB manuals and the first version of the oil filter

conversion for early XPAG engines, which we have continued to refine up to the present day – producing the same basic item for over 40 years! About that time we also made thermostat conversions using a modern waxstat. This item is also still in production having sold 100s to private and trade customers.

In 1973 we opened a shop at 25 St Peters Street, Ipswich still retaining the farm buildings for cars and bigger stuff. We then took on our first full time employee, Chris McCarthy, as parts manager, also a part-time packer.

In April 1977 we moved again to a much larger shop in the centre of Ipswich at 21 St Margarets Green giving us considerably more space and a huge cellar where we stored used parts - this became a source of great interest for customers who could often find elusive items that were remains of our early days as MG dismantlers. Our range was also extended to include body panels and timber frame sections as well as high quality interior trim and weather equipment to original We took on additional office and standards. packing staff to cope with the increased business, and were invited to become founder members of the organisation which became British Motor Heritage. We are now the oldest established MG parts supplier in the UK.

In 1986 we purchased an industrial unit on the west side of Ipswich at 282-284 Bramford Road.

This has proved to be ideal for our needs having enough space for our ever increasing stock, a small workshop area, and easy access from the A14 trunk road. Paul Banyard joined us just prior to this move, and his enthusiasm, computer skills and extensive knowledge of the cars and parts led him to launch a new range for the later Farina Magnette Mk3 & 4, also taking on the rest of this 1.5 litre range of saloons, Austin, Morris, Riley and Wolseley versions for which another catalogue was produced catering for these models. However we have never felt the need to cater for MG sports cars other than T-Types and MGA together with Y-Type & Z-Type saloons, so that we have concentrated on building our inventory for these models, finding ourselves with an ever-growing range each year, always with new projects in mind.

Paul has built our webshop <a href="www.mgbits.com">www.mgbits.com</a> almost single handed, and we now offer secure online shopping by credit/debit card, PayPal and other methods. The website includes many excellent photographs of our range as well as interesting details of customers' cars and helpful information. We even have an online live help facility.

Mike and Paul now run the business as co-directors with the valued assistance of our telephone and online sales staff. Barry Naunton, original partner of NTG has re-joined the company running a small workshop for refurbishment of used parts, which we stock when new items are not available.



#### Meet Sabrina, TD's four door Sister

I have been a petrol head from well before that term was coined for motoring enthusiasts. Virtually from birth I have had oil in my blood. Living in postwar West London there were many fascinating car related places. AC, Lagonda and Maranello Concessionaires, Performance Cars and The Chequered Flag garages all within easy cycling distance but I did not have to travel far to my first passion; Morgans.

Our backyard in St Mary's Square, Ealing backed onto F H Douglass and Son and was always full of Malvern engine and chassis bits. I wanted one! Of course, as a teenager, there was no way that I could ever afford even an antiquated three wheeler. My brother, Peter, and I cut our engineering teeth on these handmade machines. Dougie, the owner gave us little jobs to do and even paid us pocket money. He explained such mysteries as fly-off hand brakes and sliding pillar front suspensions.

Peter carried on after he left school and became an experienced motor mechanic at Nagles Garage in Kew. I joined the Royal Air Force as an Aircraft Apprentice, and went on to work on such diverse types as Comets, Canberras and Vulcans.

Of course, like so many RAF types with worldwide postings, I have had many interesting cars over the years. These include a 1948 Triumph 2000 Roadster with a three speed gear change on the right-hand side of steering column, Peugeot 203 with upside down column gear lever, Citroen DS, Goddess of weird and wonderful, Ford Specials, Imps, Beetles, BMWs and all manner of machines with rear wheel drive, front wheel drive with front, mid and rear engines. Strange how every manufacturer tells you that their design is the ultimate expression of automotive perfection! All these cars had different characteristics and a soul, not like the bland Euro boxes of today that have more or less settled for the Issigonis formula.

Meet Sabrina, my current mistress, whoops, motorcar!



Photo 1 - 'Meet Sabrina'!

We met on a blind date, but from the first moment we connected she spoke to me. On our first meeting, the last four digits showing on her odometer were exactly the same as my RAF identity number! Old before her time, a 1950s war baby dressed in her mother's 1930s street wear. A timeless charm, some might think she is frigid because she does not have a heater, but the servoless drum brakes are guaranteed to get you hot under the collar at least once every trip. No seat belts, no head rests, just a slight feeling of insecurity so you must give her your full attention.

No wireless, she needs you to talk to her all the time. She answers with rattles, knocks and squeaks just to let you know she is listening. Reliable, of course not, just like any really interesting female she likes to keep you guessing with a mind of her own. Spirits of previous keepers whisper in your ear to remind you that you are not the first.

She will show you up in front of friends, like the time I tried to demonstrate her self-jacking system. Perfect manners before, perfect afterwards but no amount of coaxing could get her to curtsey to an audience.

Does not like the rain, not keen on the dark; happiest when tucked up with a good page turning workshop manual in her carpeted car house. Craves constant attention - check oil and coolant before and during every journey. A handful of grease nipples that demand a squeeze every 1000 miles. Leaves an oily signature on the ground wherever she has been; never discreet.

So who is Sabrina? She is a 1952 MG YB Saloon. 1250 cc, 0-60 in a time to eat lunch; Top Speed, enough to cause tail backs on motorways. One of a small, by modern standards, production run of 1301 YBs built between 1951 and 1953. Some thought she was an ugly baby, unloved at birth. Born in Abingdon on Thursday 28<sup>th</sup> August 1952 but only registered on the 6<sup>th</sup> October 1952. Why the gap? In the 1950s few people wanted a saloon with a separate chassis and body bolted on to it when you could buy for less money a snazzy all in one unitary body like a Morris Minor or Austin A30. Only a few discerning professionals that could not aspire to a Bentley VI could have the traditional look for half the price. Lawyers, doctors and businessmen did buy, but there was no big queue of customers. The little MG saloons were often bought out of loyalty to the open sportscar of their carefree, pre-war, single life style. Now in the 1950s, with maybe a new family commitment, there was more choice with the likes of Vauxhall, Rover and Humber to show you the modern way.

However, for the enthusiast, her little sister was a very different character. They shared the same undergarments and even the beating heart was from the same XPAG gene pool, but she was a Hussy, a little wanton, who preferred to go topless. Her name was TD, and the boys could not get enough and loved her from the cradle.

The Y-Type is a very close relative to the TD. When first conceived in the late 1930s, the small saloon had rack and pinion steering, independent coil spring front suspension all new to MG. The YB variant continued the updating with twin leading shoe front brakes. These features were the same as the new TD sports. The chassis of the TD was loosely based on the Y type frame. The major difference being that the sports version had the rear axle mounted under the chassis rather than the saloon's above the frame design. Many components even shared the same parts numbers. Of course, the engine was very similar with the saloon being equipped with a version of the XPAG motor. The main difference for the saloon was the adoption of a single SU instead of the sporting twin carburettor set up for the sports model. (The Y Tourer variant retained the twin SUs so the engine was even more akin to the two seaters).



Photo 2 shows the single SU carb set-up in the XPAG of the YA and YB.



Photo 3 – the Editor just had to show the other side of this beautifully clean engine!

Sabrina is not a car; she is a 'motorcar'. She belongs to an age long gone, but not forgotten. Do I own her? Not really, my name is on the registration documents at DVLA, so she admits to me being her current keeper, but she is a fickle mistress, always looking for a better offer.

Why Sabrina? Bewitched possibly, but gentlemen of a certain age might recall a certain well-endowed British actress of that name in the 1950s. Her name was Norma Sykes. Like the original, my

Sabrina has beautiful eyes, but just look at those hooters! **Mick Bath** 



Photo 4 – 'Sabrina' showing off her hooters.



Photo 5 – quality interior (none of this moulded plastic Eurobox rubbish!).

Ed's note: My brother owned a YB in the mid 1960s. I remember that it was green with beige interior. As a teenager I used to love sitting in the car and taking in the smell of the leather seats and admiring the lovely dashboard. Alas it had some suspension damage on the front offside and also a crumpled wing. Archway Engineering in Manchester were able to supply the parts but the price asked was beyond my brother's reach at the time and the car was reluctantly sold. I often wonder what became of the YB and do hope that it survived.

To quote Mick "Some thought she was an ugly baby, unloved at birth". Apparently, one such lady was Jean Kimber-Cook. Jean recalled (in the much celebrated DVD "Inside the Octagon 2") how on a visit to the Factory 'Uncle' John (John Thornley) was very keen to show her his new saloon model. However, when John proudly uncovered the new car Jean was underwhelmed that she couldn't help saying that she didn't like it (or words to that effect) which must have upset him.

Nowadays the Y-Type has an enthusiastic following and most definitely worth a visit is the website of The International MG Y Type Register <a href="http://www.mgcars.org.uk/imgytr/index.shtml">http://www.mgcars.org.uk/imgytr/index.shtml</a>

# XPAG OVERHEATING - A CURE (OR WAS IT A PICKLE?)

At Stoneleigh in February I met a young TC owner (a rare find!) – almost certainly the youngest I had ever conversed with.

Stuart Maddock had 'served his apprenticeship' on 'proper' MGs under the guidance of his late grandfather in the latter day 90s/early 00s. Initially helping with tasks such as engine cleaning and minor bodywork adjustments on a PA, he progressed to assisting with the rebuild of a TC.

By the summer of 2005 the TC was ready for use and Stuart started taking it for short runs in order to familiarise himself with the driving technique required of a classic. In doing so he collected a long list of faults, which he rectified one by one.

Becoming more adventurous, he tried some longer trips and discovered the dreaded overheating *lurgy*. It manifested itself by stalling and leaving him stranded for upwards of an hour.

In an effort to avoid this annoying (and embarrassing) tendency, Stuart started to plan trips on the basis of one hour's drive away, or to leave either early or late in the day when the ambient temperature was a lot cooler. He became something of a regular spectator at cricket matches in Datchet, Windsor and Eaton whilst waiting for the car to cool down.

Taking in the pleasant sound of leather on willow in a plush green open space was quite tolerable but overheating at traffic lights on a dual carriageway at a four way interchange on the Reading IDR was certainly not!

Fortunately, being a Structural Engineer by profession, Stuart was carrying a full hazard kit and luminous yellow jacket in the car, so was able to warn the traffic of the breakdown.

A diesel engined police car, which arrived on the scene to investigate what all the fuss was about, unfortunately caught the overheating bug as a result of keeping the TC company with its engine idling for 30 minutes. Whereupon, Stuart pulled away to get off the road and cool down in a quieter place, waving away an RAC patrol van in the process.

Enough was enough – something had to be done! After mulling over the problem for quite some time Stuart eventually concurred with his father that the replacement of the thermostat was needed. A phone call to NTG resulted in a nice new shiny thermostat arriving through the letterbox. Three hours of work replacing the part and cleaning everything up resulted in.....yes, you've guessed it!! ......no improvement whatsoever!

This had now become a serious matter and further investigation was a priority. After pulling off all the remaining pipework for the cooling system and looking at the engine internals from the removal of the thermostat and connections, everything looked totally silted up with 5-7mm of deposited residue on all surfaces. Even the replaced thermostat became silted up within weeks of installation.



Photo 1 showing the 'orrible crud on the new thermostat which had only recently been fitted.

Stuart takes over the story from now on:

"I attempted a few suggestions from forums, including removal of the thermostat and even drilling holes to assist a constant flow of water. Still there was no improvement.

Being as the problem could hardly get much worse I asked a friend to knock up a new mounting piece to bolt on to the engine and during a couple of night school classes I perfected the part I had in mind that would allow for the engine to be cleaned in situ.

A trip to Beaulieu Autojumble later (a three months' wait) and I had all the pipework I needed to run through a cleaning mixture of heating system descaler, light acid and the nastiest cleaning mixtures the general public can buy.

Using hot water in a plastic tub and an electric pump, the mixture was pumped into the top of the engine block and run back out with pipework over the front apron and into the tub. A heating element was added to the tub to keep the mixture hot and 24 hours later of using a very strong to weak mixture I then repeated using a neutralising agent. The old thermostat was placed in the tub and came out like new.

The water that came off looked like a smurf that had been in the jungle for three months. The TC had been sat for over 20 years prior to its first use.

Rebuilding the cooling system and taking the car out was a revelation. The TC now had acceleration; the engine lasted all day without overheating and was happy in heavy traffic.

I then turned my attention to the radiator and decided that in principle, the same system could be used to clean it. I'd already asked if this could

be done and was told 'no' by almost everybody. I was advised to take the radiator out or buy a new one (at vast expense!).

Another trip to Beaulieu with yet more puzzled looks from a very bemused seller as to why I was trying to piece together what can only be described as an imitation elephant's trunk from a combination of Vauxhall Victor, MGB GT and Austin hose pipes. Still, I had my system working on the radiator in no time and for good measure I recleaned the engine block.



Photo 2 - cleaning the radiator in situ.

Attention has also been given to the problem of fuel vaporisation with liberal use of exhaust wrap.

JXK 47 has been running now for the last five years without a single engine problem. My system works on any radiator of the T-Series and on all XPAG engines. I have also used the system on two other vehicles and both owners have reported back that there has been no recurrence of overheating problems.

My TC seems to be getting better each year and I put this down to careful maintenance.

#### **Stuart Maddock**



#### JXK 47 (TC8120) - very cool!

**Ed's Note:** Stuart is hoping that someone out there can help with the history of his car. It is known that it was originally an export model and was used for hill climbing and street racing. Apart from this the car sat in pieces for around 20 years.

#### Manchester XPAG Project Newsletter – February 2013

As suggested in the January newsletter, there has not been a great deal of progress this month due to exams. Despite their time spent revising, the team were able to finish their poster outlining the problems they have identified with classic cars and modern fuel and the tests they are planning to conduct. The poster is here: <a href="http://goo.gl/tKSGr">http://goo.gl/tKSGr</a>

Now is the time to book your place at the 'T' Register 'Rebuild 2013' event on 23 March at the Heritage Motor Museum, Gaydon if you would like to discuss this project with the Manchester XPAG team in more detail.

Ed's Note: The event is now over-subscribed.

All the replacement parts to refurbish the engine have been delivered. Thanks to the Octagon Car Club and Mad Metrics for their help. Unfortunately, the team has not been allowed to work on the engine due to the lack of "expert" assistance, a problem recognised by Dr Rob Prosser who has arranged for technical help to be provided.

The manufacturing and delivery of the hardware to mount the engine on the dynamometer is progressing, the flywheel mount has now been laser cut and delivered and shaft connector between the engine and dynamometer manufactured.

The students also have the LM-2 A/F analyser and lambda probe, kindly donated by Motor Sports Inc. However, this was nearly lost in transit by Parcel Force who, on the first attempt were unable to deliver it to the same address at Manchester University where the engine parts were sent. Fortunately, it was returned to Peter Cole. The team are in the process of designing a fitting for this probe into the exhaust pipe.

The original plan has slipped. The aim is now to finish the assembly of the engine and mount it on the dynamometer over the first two weeks of this month.

Last month I highlighted the problem the team were experiencing in finding information about or sourcing 1950's petrol. We are now in the very fortunate position of having two fuel experts who are able to advise the students. Nigel Stevens, a gasoline development engineer between 1969 and 1975 and MG TC owner responded to the request in *Totally T-Type 2* for help. He is now in regular contact with the students. In addition, Matt Vincent a motor vehicle fuel expert has provided invaluable advice on a testing methodology to isolate the effects of fuel composition, volatility and octane rating and has provided fuel mixes for this purpose.

I believe the students are now in a very strong position as they are now have all the information

they need to source the reference fuels needed for their tests.

With their exams behind them, the team's focus is now on getting the engine installed in the dynamometer, fully instrumented and running the different fuel tests.

Paul Ireland

# Manchester XPAG Project Newsletter – March 2013

As the University was concerned the students did not have sufficient experience to reassemble the XPAG, they employed a part time technician to perform this work. The engine has now been fully rebuilt with the replacement parts provided by The Octagon Car Club and NTG in Ipswich. The engine mounts, guards and other parts to install the engine in the dynamometer are ready and the plan is to have the engine fully installed and "ready to go" in the first week of March. We are looking forward to their initial set of results when the students present at 'Rebuild 2013' on March 23.

Fuel has continued to pose problems despite the help give by Nigel Stevens and Matt Vincent.

Matt provided a contact in a specialist company able to mix fuel to given specifications. It was hoped this company would be able to provide both the "Classic" fuel and fuels with different volatilities and octane ratings for the tests. This would have allowed the different factors that may affect combustion to be isolated. In the event this company was unable to help. Perhaps if the current tests prove promising it is something we could follow up with additional support from other organisations.

Nigel, suggested using aviation fuel (UL91) as a reference, this is guaranteed to be a hydrocarbon only lead free fuel, which was all that existed when the engine was designed. It could also be used as a base for the students to mix their own fuels by adding alcohol or ethers. In addition, comparisons will be made using BP Ultimate and the ESSO Unleaded. The reason for the choice of these fuels is that they are readily available to owners of classic cars in the UK.

Evaluating the effect of "pump" based ethanol blended fuel is more difficult as the actual concentrations are not published and, currently, E10 is not available in the UK. In an attempt to evaluate this, tests will also be performed using BP Ultimate (understood to be ethanol free) mixed with 10% ethanol.

The testing plan is to perform "fuel loops" to produce a contour map of the variables controlling the engine (timing, mixture setting, throttle setting, etc.). The next step for the students is to prepare a test methodology document for approval by the supervisors.

**Paul Ireland** 

#### **Bits and Pieces**

Interleaf Spring Pads for TD/TF/Y Rear Springs made from Nylatron



Nylatron is said to have high mechanical strength, stiffness, hardness and toughness, good fatigue resistance, high mechanical damping ability, good sliding properties and excellent wear resistance. A batch of interleaf spring pads for TD/TF and Y-type rear springs has been arranged by the Editor. The cost is £1.87 per pad, which compares favorably with commercially available rubber pads.

#### **New Rear Springs for TD and TF models**

Progress is being made and I will shortly have an original spring from which to copy. The springs would be <u>Made in England</u> by an old established spring maker and have drillings for the interleaf spring pads (some commercially available springs don't). The same arrangements for payment would apply as for the TC springs i.e. the spring maker would invoice the customer and dispatch the springs direct. A guide price is £100 plus VAT per spring. Expressions of interest would be welcome to <u>jj(at)octagon.fsbusiness.co.uk</u> {substitute @ for (at)}. Alternatively, use the website contact form.

#### The Green Spark Company

Michael Moran has received good service from this company. Website is <a href="www.gsparkplug.com/shop">www.gsparkplug.com/shop</a> Postal address is 'Mocliffe', 29 Northwhich Road, Cranage, Cheshire CW4 8HL. Mike describes the company as "An incredible supplier of ignition parts. Many colours of braided cable and HT Plug Lead numbers to shrink fit or clip-on in both yellow and white. Excellent service and prompt reply to questions."

#### **EP Services – Water Pump Re-conditioning**

Yet another glowing testimonial for EP Services. Adrian Sheppard reports as follows:

"E P Services of Wolverhampton provided stunningly good service in reconditioning my TA water pump when it really mattered to me. I needed it urgently to take my daughter to her wedding and they really put themselves out".

#### **Motor Insurance**

David Pelham reports on the competitiveness of Footman James vis a vis Hagerty as follows:

"It is now a year since I moved my Classic Car Insurance policy to Hagerty. If you recall I had a renewal from Footman James in February 2012 for £427.02, an increase of £78.44 (22.5%) from the 2011 policy costs. When queried I was told that insurance costs had risen and this was the best price available. I renewed with Hagerty at a cost of £245.66 a saving of £181.36!!

I recently received a letter from Footman James inviting me, to contact them, via a premium rate number to give me a quote for 2013. After finding a direct (included on my call plan) number from <a href="https://www.saynoto0870.com">www.saynoto0870.com</a> I called them. The quote I received this year was £346.82. This represented a saving of £80.20 from their 2012 quote, despite an increase of £6,000 on car values. One can only assume that rates must have gone down or Aon (Footman James' parent company) are 'feeling the pinch' with classic car owners deserting them.

As a matter of interest my renewal with Hagerty this year has been quoted as £245.66, no increase on last year's premium. I will be renewing with them but am saddened that my saving this year is "only" £101.16!

#### A Modern Midget engine in a TD?

lan Bush asks if anyone has fitted a Modern Midget engine (BMC 'A' Series) in a TD?

#### Alternative to a TA cracked cylinder block

Neil Arnold e-mailed me as follows:

"Having rebuilt my TA engine a number of times over the last 45 years, I have finally succumbed to a very cracked block. I have fitted a 1939 Morris engine with a 5 speed Sierra box. It's wonderful to drive...Horror of all horrors!! Any comments?"

#### **Heights of Danger DVD**

### A Daredevil MG TD Sports Car Alpine Race Adventure on DVD.

Jonathan Goddard kindly drew my attention to this DVD (available from Amazon and on eBay). It also got a mention in Issue 3, courtesy of Ted Hack.

In addition to this original 1953 "Heights of Danger" title story there are a number of other features;

A Safety Fast 1948 short film by the Nuffield Organisation showing MG's racing in West Palm Beach Florida; 'Goldie' Gardner in Germany setting the 1Km record run at 204mph in a 12hp M.G., followed by original movie shots of the TD assembly line in Abingdon where the building of the TD is followed by Ian Appleyard taking this TD straight off the production lines, registration FMO 960, and driving from Abingdon via Central London to Dover, before being lifted aboard a ferry for the channel crossing and the 700m trip, via. Paris, to Val d'Isere in the French Alps, for the skiing.

(This story was recounted in The Autocar, January 27 1950, which details the Lowlands' Skiing Championships as well as towing the British ski team on the icy roads!).

In addition period film details the skiing Championships at Utah in 1945, followed by amateur racing car drivers racing around a course in West Palm Beach, Florida.

The Festival of Britain 1951 has exhibit B801 a MG on show before being transported to Bonneville Salt Flats in Utah, where with Goldie Gardner a number of records including the one hour at 137.4mph.

'Goldie' Gardner appears again on a German autobahn in 1951 at Dassau, breaking the International kilometre record at 137.4mph

Stirling Moss in 1957 at Bonneville in MG EX-181, achieves 2Km at 224mph and breaks 5 records.

New Twin Cam MGA, in 1958, at MIRA testing track (car registration) ORX 885 achieving 2 miles per minute.

Goldie Gardner at Bonneville in MG EX-135, 1952. Reported in detail in The Autocar August 29 1952, and in Autosport September 5 1952.

MGA Twin Cam Production model 1958. Achieves 2 miles a minute.

#### Oil Thermometer (optional extra on TD)



Another 'offering' from Jonathan Goddard. Jon helped me answer a query from a South African reader about the oil gauge on a TD. Here's his response to the query:

"The TD up to chassis number TD13913 only had the oil pressure gauge, from TD 13914 the combined Oil & Water gauge was fitted. I also understand that an oil thermometer (temperature) instrument (gauge) was available as a factory option and was fitted to the far right of the dashboard (on RHD cars). See attached picture. The fitting of this instrument required a 2 inch hole to be drilled through the dashboard, and its design and size matched the other gauges (Voltage and Oil/Water)."

#### Issue 18 (June 2013)

I hope to be able to publish the latest information from the Manchester XPAG project which will have been presented by the students to the 'T' Register 'Rebuild 2013' event on 23<sup>rd</sup> March.



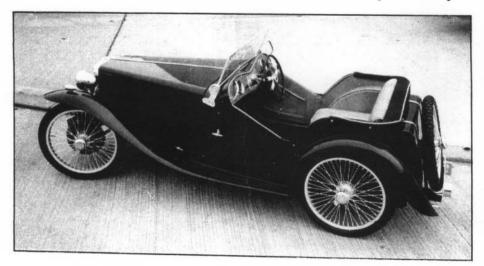
Above: Bo Gramfors who has owned TC 3113 since the mid-fifties trying out his car on the track in Sweden. According to Gabriel Öhman, who sent me the photo, Bo, who has rebuilt the engine twice since he has owned the car, is now around 80 years of age – a TC keeps you young! Below: Peter Zernial's TC, all kitted out and ready for the 5th Peking to Paris Motor Challenge 2013 which takes place in May.





Knightsbridge London

### HALF SIZE MODEL MG TC (1945)



#### **SPECIFICATIONS**

Dimensions

Length Width

69 Inches

28 Inches 26 Inches

Height Weight

150 lbs

#### Performance

7 mph

with forward and reverse.

#### Power

12 volt DC permanent magnet, totally enclosed geared electric motor driving right hand rear axle.

#### **Brakes**

Operated by conventional foot pedal.

#### LIGHTING

12 volt lighting system on main lights, side lights tail and instrument lights.

#### Charging

The onboard charging unit meets I.E.C. specification and can be switched to either 240 volts AC or 110 volts AC.

Special electronic engine sounds.

This magnificent little car is not for highway use.

Note that the model MG will not operate as long as the seat giving access to the motor, drive and charge unit is not in place.

MADE IN ENGLAND.