



This report dates from 1997

If you are wondering what that noise is...it is Chris singing the "Lambton Worm"

### SUZUKI 500 FANATICS Chris Bradley builds a T500 racer

Chris Bradley built a race 500 from a heap of T500 parts. His experience was published in Classic Motorcycle Mechanics in their February 1999 issue. Chris is still living off the proceeds from writing that article and plans a trip into the heart of Washington Farm some time this year to celebrate his new-found fame. He has since sold the T500 racer to Frank Melling.



Not registered  
Frame no. tba  
Engine no. tba  
Estimate £3,000 - 3,500

## 447 SUZUKI 'TR500'

Suzuki withdrew from Grand Prix racing in 1967 but immediately looked for ways of promoting their new 500cc road bike - the T500 Cobra - and the following year launched the TR500 racing version. The air-cooled twin-cylinder engine proved highly tunable, Jack Findlay winning two World Championship rounds on a TR500. Today, genuine works TR500s are rare. We are informed that this machine is a faithful replica of a works TR500 built largely from new parts with a fastidious attention to detail and with no expense spared. The double-sided twin-leading-shoe front brake is brand-new and has titanium torque arms (the same material is used for the rev-counter bracket) and the fuel tank and seat base are handcrafted in aluminium. The machine has done only a few test miles since completion, and will require careful running in before being ready for use in parades, or historic racing.



## Chris Bradley's T500 based racing special - Part 1

"Chris is from Newcastle on Tyne and he has been so kind as to keep me informed on his long and arduous path to an immaculate TR500 styled T500 based racing machine. Some of the voluminous correspondence that has graced the ether follows.....a bit disorderly, but you know how it is..."



At 05:57 PM 16-11-97 +0000, you wrote:  
Hi Murray,

Its good to see the T500 pages increase and I am flattered to see my pics being used. I will keep taking photos as the project progresses. I am expecting my TR lookalike tank and seat unit to arrive any day now which will be a major step forward and when I get my crankcases back things should speed up a bit.

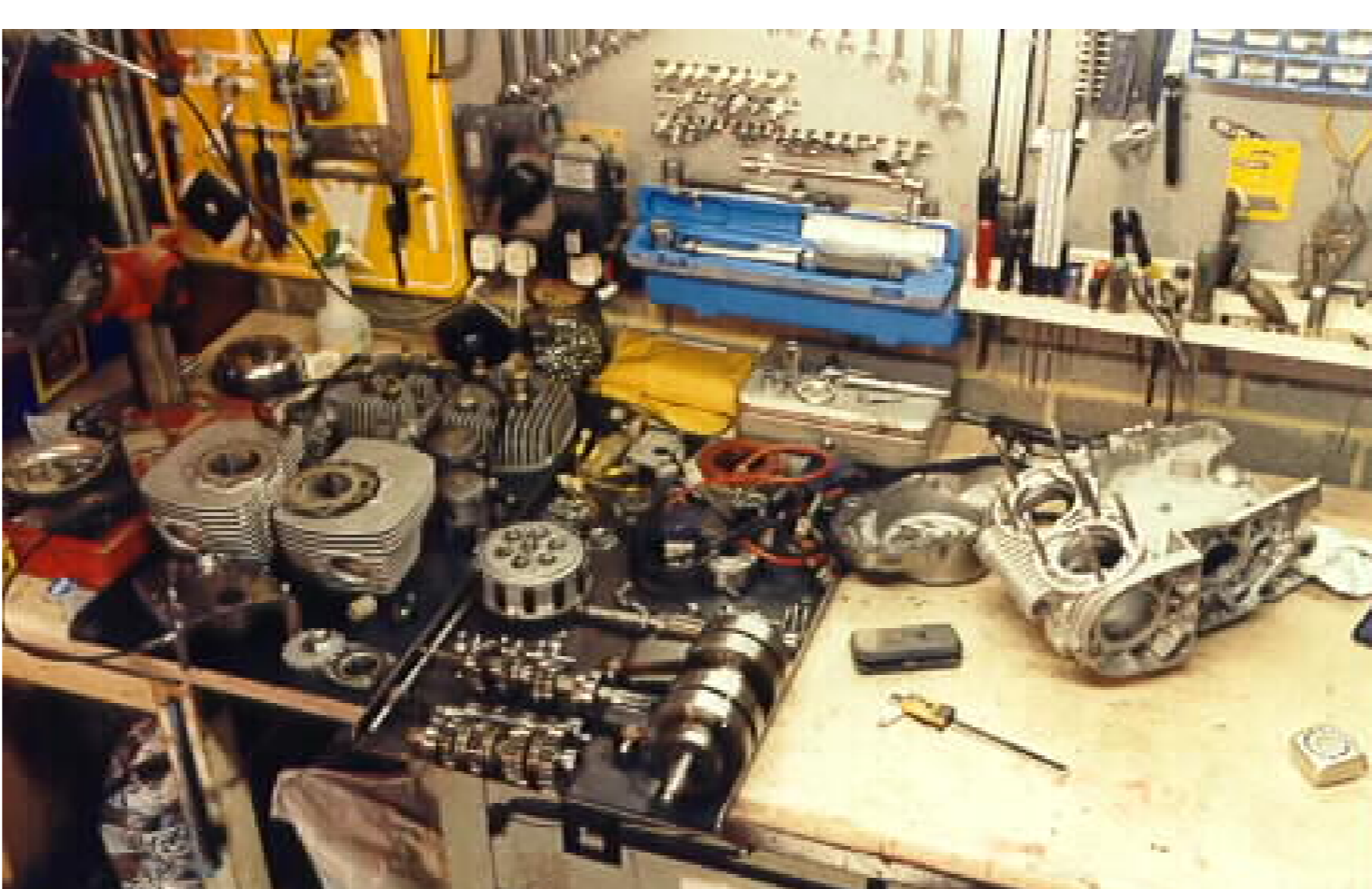
Since begining this project I have been told by yourself and others to modify or completely junk the oil feed pump on my motor, but I am not really sure why. You explain that it takes very little to drive the pump and it is extremely reliable, so why not leave a good thing alone ? I would be very grateful if you can offer an explanation, Rob Greenhill is unable to answer this question also.

It seems we are strengthening our ranks over here in blighty and there is talk of a Racing T500 club.

We may even get a special display of racing 500s at next years Jap Classic Show at Stafford. (If we build it will you come ?)

Its bloody miserable over here just now, were just waiting for christmas to come and go then we can look forward to next season and som good fun.

Best regards.....Chris



Hello there in Blighty, Chris.

I am jealous of your project and look forward to the pics.

I am mighty keen to re-assure you that I am a fan of the standard oil system. I do not modify the oil feed at all. I do set the pump to one third open and wire it there though. Full throttle gives too much oil for racing. I also mix about 1:60 pre-mix in the tank. I'm sure I mentioned that in my pages. It is others who go on about modifying the oil feed to the bearings. I do not subscribe to that school. It have found it absolutely bullet-proof with that setup.

Love to come to England. You'll have to get all of the T500 Racing Club members to contribute 10% of their membership fee to our fares, I'm broke now!!!!

cheers Murray



Wed, 11 Jun 1997

The project is coming along steady with a rear wheel now built, today I received a replacement drum for my GT750 front brake (first one sent was chipped) GT.500 forks and yolks (tripple clamps) now ready with trimmed down and polished sliders so I can now get the front wheel built. Avon AM22 & AM23 now purchased and front fitted



Date: 19 Jul 1997 23:46:20  
From: Chris To: Murray Barnard  
Subject: Re: The postie's been

Yo Muzza,

just reporting in to say that the Femsas arrived safely yesterday. I would be grateful for any information you have for setting the thing up. I cannot tell where the rotor needs to go in relation to the crank as there is no keyway !

Although its a bit on the heavy side it certainly is sturdy, I hope it never falls of during a race ! it would adopt the stance of a bouncing bomb....

Bob greenhill has got a milling cutter jugged up to run inside the crankcase of T500s using the mains as a rotating point for the tool. He then machines the crankcases perfectly round - around the crank webs and is then able to make stuffers cut from alu pipe to fit within a few thou of the crank. ( how about that )

Progress on the bike has been slow lately, now I have the ignition and as soon as the bloody ponds finished I can get cracking again. Hope your well and things are drying out a bit over there,

Your bestest fan ever,  
Chris.....

Yo Muzza,

The Femsas's great, although heavier than I had imagined ( have you got one made in Titanium, Unobtanium, Dis-appearium, or Re-appearium ? ) Cos there much lighter.

I should have some good pics of my frame soon, as modified by outfit racer Tony Baker. A great welder and very clever engineer. I will let you have a one in due course. It may serve as an example for your apostles.

Chris....



Date: Wed, 30 Jul 1997 21:09:10  
From: Chris  
Subject: Racing Suzuki T500's

Yo Muzza

Things have gone mighty quiet around here,  
Thought I had better give you a shout.....

The Femsas is going to be O.K. I have been making a new mounting plate from Dural, and the motor is stripped again for more mods.

Rob Greenhill says thanks for putting his name up in technicolour and is enjoying the info I pass on to him.

Rob has offered to make me some stuffers, so I have to send him my crank-cases down to be machined to take them. (as were the factory racers) we thinks.

I have also introduced bob to Martin Crooks who is also interested in some stuffers. When we start the T500 Racing Association we may be looking for a president...Sir. Another development is that there may be a Post Classic event to be held with the Manx on the Isle of Man next year. This would mean you may see T500's racing once again around the Island.

In accordance with the tuning data sent in by A.G.C. I have got my brother-in-law on making some 2mm base gaskets out of sheet alloy using E.D.I. (Spark Erosion) and we hope to flog a few if we can.

Best Regards.....Chris.



Stuffers for the crankcase



Stuffers fitted in the machined crankcase

From: chris bradley  
To: pindan@hotmail.com  
Subject: T500 expansions  
Yo Muzza,

I have also got some interesting formula from Rob Greenhill which was written by an Australian chap named Alexander Graham Bell.

My pipes look good but the formula suggests that my motor will peak at 5898 RPM.

I know you say that the pipes need to be long on a T500, but Mr.Greenhill reckons they should be about 1 metre from piston face to point of convergence of the baffle.

The T500 racing circle widened the other day when a journalist from Classic Motorcycle & Mechanics contacted Rob Greenhill. A guy called Don Leeson. He too has just built a T500 Racer. If he's on the net I will URL your website. We are trying to get a stand at the classic show next year for T500 racers, wouldnt that be something, you must get if we do it. Anyway theres a bit of interest brewing over here me thinks !

Chris.



Lightweight crank and stuffers





## Chris Bradley's T500 based racing special - Part 2

"The continuing saga of Chris Bradley's successful attempt to build a T500 racer...with some fabulous shots of the finished product."

Date: Fri, 02 Jan 1998 13:07:31  
From: chris bradley  
Subject: latest project pics & Greetings  
Happy New Year from the Motherland.  
I have sent some more pictures which I hope will keep you tickled. Things aren't progressing too quickly, but even with a plastic bag on the fairing looks trick.

"Looking good! Chris

I always found it difficult to put a real TR500 fairing on a standard frame. The dimensions are all wrong and the engine, forks and bars get in the way. Is your fairing a TR fairing or is it designed to fit on the T500?"

Date: Fri, 09 Jan 1998 17:38:24  
From: chris bradley



Yo Murray,

The fairing came from TGA racing and cost just under a £100 with the screen. Your right it is a bit of a neat fit but I think it will be ok. It's well made and I can recomend it. I will let you know if I have any problems.

Please don't tease me about the weather!

Freezin me bollocks off.....Chris.

Had a guy come over last night after a main gearbox shaft, the one which wears out if the oil is too low. He said he had tried all over the world and can't get them anywhere. Anyway, I said he could have the one from a daggy old gearbox I had. Just had to get it out himself. Blow me down if it wasn't absolutely pristine. The gears and bearings looked new. Oh well, wonder what it was worth?

cheers  
Murray

Yo Muzz,

Know what you mean about the gears. Mine was gone on 5th also.

What I did was to press the gear off, machine the boss of the other side in a lathe and press it back on the other way. As the teeth are symmetrical. Then for good measure as the surface interference is a lot less I had it tig welded back on on the inside. Me mates got the lathe and the press, and the welder charged me £5. Not bad for a recon gearshaft.

You know we have not seen any snow yet over where we live, its defanately getting warmer. I expect it will be much hotter in W.A. next year.... Have a beer on me mate ! and stay coooool

Chris.



Les Trotter's old pipes

At 09:49 AM 29-11-97 +0000, you wrote:  
Yo Muzza,

Now that I have some more pics of the project I thought you might like to see them.

Altogether the tank & seat with oil tank fitted seperately underneath came to £239 or AS480. The tank looks like a TR. but has cutaways to locate onto the standard tank mounts. This is just to prevent any forward movement. The whole thing sits down onto the frame with C.N.C. accuracy. I am pleased !



Last week I gave my heads to an ALU Welder to fill. Rob Greenhill has the tech to machine a squish head so the motor is still being worked on too. (can't wait to start building in earnest)

Regards.....Chris

Date: Sun, 15 Mar 1998 00:56:50 +0000  
From: chris bradley  
Subject: In need of some bits !

Yo Muzza,  
just thought I would keep you up to date on the o'l project. I just spent today stripping the frame properly and polishing the tubing ready for a coat of paint. I just had some 'top hats' welded in to take the coils just below the headstock. They match the ones I am using to mount my rearsets.



Swing arm is shortened but only by an inch as I can only get the back wheel so far forward due to the way the pipes fit neatly around me back tyre.

Tomorrow the frame gets painted and the first coat of white basecoat goes on the fairing. Still a bit of work left on the motor, gotta smooth the tops of me pistons and then measure the squish clearance, then get the barrels turned down to fit. After that Its down to assembly and make some rear set mounting brackets and I think I will make my own gear and brake levers. I think I will take a week from work when all the painting is done and get stuck into finishing the thing. It's gone on long enough has this. I wanna see the thing go.

I seem to be having a real job trying to track down some dust covers for me fork sliders Muz. You can't help me out here by any chance ? Suzuki don't make them any longer for GT500 forks and I am struggling to get some second hand.

Best Regards.....Chris

From: chris bradley  
Reply-To: c.bradley@virgin.net  
To: pindan@hotmail.com  
Subject: The End is Nigh



Yo Muzza,

Well Its starting to look like a racing bike. The construction work is completed now, just nuts and bolts missing. Every thing is Stainless including the wheel spindles and engine sump plugs and crankcase bolts, so it should stay pretty for a while.

The bike feels really light but I hav not had a chance to weigh it yet. Perhaps I can get it on two pairs of bathroom scales for a rough idea. As yet the bike is still totally dry.



I still need some carb jets and needles, and I am not happy with the throttle cable I have on, there are elbows on the cables just before the carbs, these would have been OK on a standard machine but as my carbs are much closer to the barrels it is putting some strain on the cables.



"Femsa ignition fitted, sourced back from Australia where it had graced one of my machines. Chris had to do a lot of work to tidy it up, make a lighter backing plate and repair the wiring. Looks good!"

I had to buggar about with the Femsa to get a spark on both plugs, anyone walking past my workshop that could understand swahili would have blushed. The wires are corroded right back to the resin so I had to break big lumps off it to get to good wire. Its OK though. Sort of thing you have to expect from something that old.

Anyway here are some snaps to look at, I will scan the proper shots in good time and let you know when it goes.



Hope you are all well down there, It must be cooling down now as its warming up here. Best Regards.....Chris  
5 April 1998

Thanks Chris,

To weigh your bike just put the bike on a stand and put the scales under the front wheel, and then do the same under the back wheel. Add them up...that way you can also work out the front/rear bias. It works, try it. One set of scales is all you need.

My modified road bike was about 148 kgs....lot less than the 182 kg road machine. the race bike I think was 135 kg...but we didn't run a light-weight crank at all. At that weight they chuck beaut wheelstands.

Your bike looks just great...I am so jealous, wish my looked half as good. I guess after a few seasons campaigning the shine goes of them.

Sorry to hear that the Femsa was a bugger, it is getting long in the tooth though. Make sure the timing is advanced enough.

cheers  
Murray



**Chris Bradley's T500 based racing special - photos of the finished machine**

"Chris has built a beautiful T500 based replica...wish I could see the real bike..but these pics have to do for now..!"

