

tunit[®]

diesel performance

Newsletter Spring 2003

Welcome to our Spring newsletter, the first of 2003. The new year has brought a large wave of innovations at Bromleys, kicking off a whole host of possibilities and opportunities.



V-CR showing red adjustment connector

New and ground breaking for 2003 is the redesigned common rail Tunit[®]. Previously the V-CR came with ECU adapter plugs or a solder in harness. Now each Tunit[®] has an individual plug for each type of vehicle, making fitting and removal much simpler than before.

The new V-CR also has an inbuilt adjustment on the Tunit[®] itself, carried out by moving a connector (jumper) from left to right.

The adjustment is for fuel flow and allows the customer to alter their overall power... very useful for vehicles that differ greatly from standard, if more power is required or modifications are made to the vehicle, with maybe performance air filters or bigger intercoolers (also available from Bromleys Performance Tuning), they can simply adjust the Tunit[®] to accommodate the changes.

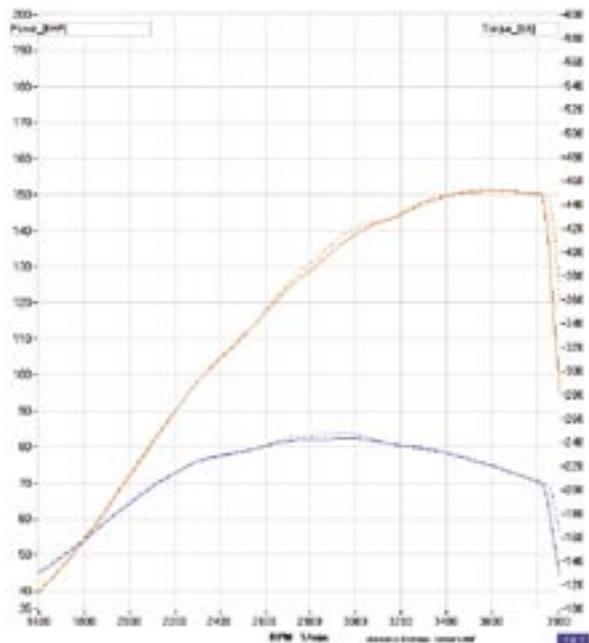
More intricate mapping can still be carried out via our 'Lap top tuning' service which can subtly alter far more parameters than a self tune, for example, where in the range the power is delivered, whether the power is delivered smoothly or more aggressively, as well as solving overall power output and inherent running problems.

One of the most advanced rolling road systems in the world today has been installed at our Workshops in Chorley.



newly installed TAT rolling road

Unlike most other makes of dyno rolling roads, the TAT utilises single roller technology, as opposed to the more conventional use of dual rollers which can cause slip and leave a greater margin for error. This along with the unique precision engineering involved in the construction of the TAT, makes for one of the most accurate rolling road systems available, giving precise, consistent readings, run after run.



The above graph shows the extreme accuracy of the rolling road, it is for an Alfa 156 after a Tunit has been fitted. The red line is bhp, the blue line torque with the solid lines being the first power run and the dotted lines the second. The almost identical lines show how little deviation there is from one test to another.

Torque has always been difficult and sometimes impossible to measure on diesel vehicles, especially diesel engines with common rail. The TAT rolling road now allows accurate readings on all diesel vehicles, whatever the injection system. This is done in combination with the fine engineering and intricate sensors that form part of our rolling road system.

Our Managing Director, Michael Bromley, was so pleased with the performance and results achieved that he has recently negotiated for Bromleys to become official re-seller of the TAT rolling road system for the UK & Ireland.

The main role of the new dyno is to enable more accurate research and development of the Tunit[®] diesel unit and the eagerly awaited petrol equivalent. However the Rolling road is also open for public use

with a spectators area so as the customer can view the dyno test for themselves. As a promotion to the new installation an offer of a free rolling road test, before and after, was run throughout January, this led to non stop use of the road all month and many smiling faces. Also smiling but very worn out was our workshop manager Eric Caan, inundated with demand. Eric booked his annual leave in the sun shortly afterwards.

Since we launched our lap top Tuning in August 2002, for common rail and single unit injection systems, it has become a great asset to individualising each vehicle.



Not only can we alter each car to perform to its optimum, we can also alter each vehicle to the customers driving style, likes and dis-likes. The service allows the customer to sit in the drivers seat and feel the changes as our technician alters the programming of the Tunit[®], the end result being adjustment to order, on the move ! The lap top tuning service is available from £30.00 +vat at the time of fitting or any time after, to customers old and new on V-CR and V-PD Tunit's[®].

Tunit[®] Distributors are now becoming established around the UK. Each distributor is trained in all areas of installation and customer service by ourselves, so the service given from the first telephone call to a lap top



tune is conducted to the same high standards. As the Tunit[®] distributor network grows, it makes the option of either purchase from a local dealer or purchase and installation a much more convenient alternative for all our customers. New distributors have recently been established in Aberdeenshire - Scotland, Ireland (North & South) and Crawley South London. Please enquire through our web site or by phone to find your local Tunit[®] dealer.

Due to the increased popularity of the Tunit[®] our work force at Chorley has now recently grown once again. Stacy Murphy has taken over the position of customer reception and is a very pleasant introduction to the company, having come from a strong background of customer care and liaison within main agents. We have a new technician working on installation, research and development and Adam Leech has added his enthusiasm and youth to the sales team, being just 21 years old, he has quickly worked his way through the company. Last but not least Gary Baldwin has taken over the marketing for the company, handling everything from advertising to web design. Gary has excellent background experience in all aspects of design and marketing, having carried out work for a number of blue chip companies, including the BBC amongst others.

As well as the Launch of the new Common Rail Tunit[®], this year also gives birth to the truck Tunit[®]. This Tunit[®] is designed for heavy commercial vehicles of all makes and over the past 12 months we have been testing and trialing a full range of Commercial vehicles ready for the Launch.

Our web site now contains a full application list for trucks from Actros to Steyr.

The main advantage of the commercial Tunit[®] is not the power, although this keeps many a driver happy, it is the fuel economy. Our testing has shown that fuel savings of up to 10% can be achieved which make it very attractive to both the owner driver and the company accountant. Fitting will be available through a newly trained group of country wide distributors, all of them having extensive experience in lap top tuning and installation. These Tunit's[®], like their smaller cousins' have the added advantage of being adjustable and are transferable between vehicles. If you require any further information then please contact us through our web site or call for an informative chat.

Despite all these new improvements we have not let up on our constant strive to improve the existing range of vehicles we cover as well as adding to that list.

Amongst some of the latest additions are:-

Nissan Navara	Nissan X trail
Peugeot Boxer	Audi A8 3.3 Tdi
Ford Fiesta	Mazda B250
Toyota landcruiser 4.2 (NEW COMMON RAIL)	





The full listings of over 400 different vehicle and engine combinations covered, can be viewed at the Tunit® web site www.tunit.co.uk

As the popularity of the Tunit® increases, Bromleys have found more magazines are requesting articles. If you have an unusual or new vehicle that we have not covered in the press and would like your name in lights then Bromleys would like to hear from you. There is a list of vehicles that are currently required on the web site, or by all means any suggestion will be welcomed by Bromleys.

Here are samples of just some of the glowing articles that have appeared in magazines recently :-

BMW 320d

"...but with the Tunit enabled, a truly impressive 195.2bhp made itself apparent, again at a pretty modest 3,700rpm, even though the engine revved freely to nearly 4,500rpm before becoming a little breathless. That's a meaty 26% improvement, and it represents a 30% increase over the 150bhp standard output."

Volvo 850

This article showed how a higher mileage vehicle with 190,000 miles still benefited greatly.

"...the standard engine readings showed a 138bhp power peak at

4,260rpm, with maximum torque of 194 lb ft at 2,800rpm – fairly impressive figures that are testimony to the fitness of this particular power unit, in spite of its accrued miles. With the Tunit module powered up, and a few trial runs and adjustments, the final 'after' figures showed a 25% power boost to 172bhp (at 4,300rpm) and a 20% torque hike to 234 lb ft, at 2,800rpm..."

What's Happening Next!

Keep an eye out for the summer newsletter, containing more news on the truck Tunit®, also we hope to have developments on the long awaited petrol Tunit's® by July. Another thing new for summer will be other lines of performance related products and accessories available through our new parts department undergoing refurbishment and due to be completed June 2003.

