

## Octane adjustment

I was very interested to read about the lack of Ethanol in Esso fuels and the Manchester University fuel tests in the May edition of *Crankhandle*.

My two Sevens go by the names of *Lady Jane* and the *Duchess of Gloucester* and are always complaining that my pencil doesn't have enough lead to satisfy their needs. This has been particularly bad during the winter months when they have been cold and unresponsive.

After much research, I've found a way to make them purr again and an instant response to a pull on the starter knob has now become routine once again. The secret is going back to the old pump fuel by adding real tetraethyl lead and here's the gen .....

'TetraBOOST' is not a substitute but is the only additive that makes real leaded fuel from the unleaded pump. It has now come to be recognized as the de-facto standard for fuel additives and is specified by National Motor Museums in the UK, France and The Netherlands, acknowledged marque experts, restoration companies, engine builders and vintage and classic race teams. Indeed, most of the most famous and irreplaceable vintage and classic cars and bikes now run and race on TetraBOOST additive.

Suitable for all road and track applications, TetraBOOST provides all the benefits of BS4040 (or greater) leaded pump fuel, without the extra cost and inconvenience of finding the diminishing number of garages that still stock leaded pump fuel. Even in cars fitted with hardened valve seats, TetraBOOST improves performance and reduces valve stem and guide wear. It slows fuel-burn rate - giving improved combustion, improves throttle response and gives smoother pick-up and cooler running. When mixed with higher octane unleaded fuel, such as Shell Optimax, TetraBOOST can easily exceed BS4040 standards, with its unique ability to make 5 Star 100 octane or much higher levels of fuel. Up to 106 octane fuel can be made if required.

TetraBOOST contains real tetraethyl lead and does **not** contain any substitute. The performance and protective qualities of tetraethyl lead vastly exceed that of the various lead substitutes based on phosphorous, manganese, sodium and potassium. Only TetraBOOST gives the enthusiast the ability to make genuine leaded fuel, which has been vital in the prevention of knock and valve seat recession for the past 70 years.

*Are substitutes as good?*

Well this depends on who you ask. The manufacturers of lead substitutes would say yes, but experts agree that nothing performs like genuine leaded fuel.

Typical problems caused by some additives include bore rusting, brown deposits on engine components and in tanks and filters. Problems include pinking and sticking valves, as well as valve seat recession in high speed use. A few scientifically-dubious alternatives are available, ranging from pellets in the tank to the magnetic rearrangement of molecules in the fuel line (Surely complete cobblers? ..... Ed). However, nothing actually does the full job of lubricating and protecting cylinder heads against valve seat recession - a job which leaded fuel has done for over 70 years with total reliability. Some pump fuel is still available but it can only be found in relatively few, widely spread outlets in the UK. TetraBOOST offers enthusiasts the convenience of mixing their own leaded fuel,

based on standard unleaded pump fuel and gives you the freedom to drive on leaded fuel wherever and whenever you wish.

#### *What's in TetraBOOST?*

TetraBOOST is a solution of tetraethyl lead in aromatic hydrocarbons, which together with the necessary chemical "scrubbers" makes genuine 4 and 5 Star petrol, with higher octanes approaching AVGAS levels available if required. Remember that TetraBOOST is suitable for both road and race purposes. A [measured dose](#) of TetraBOOST is merely added to the tank, prior to filling up with premium or super unleaded pump fuel to the correct concentration.

TetraBOOST is the only truly effective answer for collectors and dealers alike. Low mileage vehicle use may not justify an expensive engine rebuild. It may not be possible to fit specially hardened valve seats, or as in the case of some vintage Bentleys, the new hardened valve seats have split the block due to differential expansion during warm up.

Our product is specifically formulated for older engines and enables you to tour, race or tow without fear of damage caused by inadequate valve seat protection, pre-ignition or low octane fuel. TetraBOOST also slows the burn rate of modern fuels to a level more suitable for older engines, resulting in easier starting, smoother and cooler running as well as giving greater economy - a fact reported to us by our clients.

Whilst TetraBOOST is a hazardous and flammable substance it is quite safe to use in accordance with the instructions. It enables you to make 4 Star leaded petrol from around 12p per litre over the unleaded pump price. TetraBOOST is completely legal and is sold with fuel taxes and duty paid."

I have been using this additive in conjunction with Shell V power (making 5\* 101 octane!) for about a year and have found better running and no stale petrol storage problems over the winter months. The only cons are the cost (about £24 per can excl. shipping) and that it is a hazardous substance requiring proper handling precautions.

The supplier that I used was <https://www.classic-oils.net/TetraBOOST-E-Guard-15>

There is a good saving to be made if the shipping cost can be avoided by collection from Bicester Heritage, or sharing an order, as the shipping is £10 independent of whether it is a 1 can or a 1 case order.

P.S. As I lay up my cars in November can you arrange for Father Christmas to come especially early this year ..... David Southcott