

Want a TVR Cerbera with a V8 engine?....

....that needs virtually no servicing....

....with more torque and power....

....and lots of potential upgrades....

....and is supported throughout the world....

Your wait is over...!

Introducing the Cerbera LS





Everyone loves the Cerbera..

..for its looks and phenomenal performance. However, the most frequent questions asked by potential buyers centre around the maintenance and reliability of TVR's own AJPV8 and Speed Six engines. While spectacular when they are 'on song', they can be costly to maintain because of their need for frequent expensive servicing and, should they need a rebuild, this can sometimes cost more than the car is worth. The engines require detailed specialist knowledge and this is often not available everywhere. Also, for those wanting more performance, the options are limited and expensive.

My AJP needs a rebuild. What do I do?

When Steve Heath was faced with this problem, Dave Wallis at Tower View Race Services came up with the idea of fitting an all aluminium Chevrolet LS V8 engine instead. Not a technical problem, in itself. The *real* challenge would be to do it for about the *same cost* as an AJP rebuild.

After many hundreds of hours of work, the project was completed and the car has now been driven by Steve as his 'daily driver' since late 2007 — so the installation has been well tested. As a result of the success of this transplant and the interest it has generated, Dave and Steve are now offering this as a service to other owners in a similar situation.

So now there is a viable alternative to an AJP rebuild: your car can be converted by Dave and Steve to a Cerbera LS complete with a General Motors Chevrolet LSx V8 engine. These engines

***"engine options
to over 500 bhp..."***

are used worldwide and can provide power outputs from about 350 to 550+bhp. Spares are plentiful and readily available. The engines are built to be reliable

and typically have a 100,000 mile service interval with nothing to do except regularly change the oil and change the plugs at about 50,000 miles. This means greatly reduced servicing costs and even with an

***"100,000 mile engine
service intervals"***

entry level LS1 engine, the performance exceeds the 'standard' car. Driveability is greatly increased, with the ability to pull away at 18mph in fifth gear, and fuel consumption can reach 30 mpg. All this on 'standard' unleaded fuel.

A significant cost with any engine transplant is the amount of bespoke work that is needed to fit the

***"pulls away from
18mph in fifth"***

engine and connect it to the rest of the car's systems. This can require a new engine management system, clutch, bell housing, gearbox and remote linkages, along with exhaust and manifolds. This can quickly add up to a huge parts bill even before the fitting is started.

The *big difference with this transplant* was that the design brief was simple: work out how to fit the engine for the lowest cost possible. This is achieved by re-using as much of the Cerbera as possible. The engine management is the same MBE unit that the TVR uses. The transmission and gearbox are exactly the same and the gearbox doesn't move — so it is in exactly the same position, saving time and effort. The manifolds connect to the original TVR cats and exhaust. The cooling system uses the same radiator, and so on. More importantly, all the electronics stay the same so all controls and instrumentation work exactly as they did before.

In fitting the new engine in Steve's Cerbera, we did take the opportunity to improve the maintainability of the car by relocating items so they are easy to get to — and this is included in the service we're

now offering. Sensors can be changed in minutes. Remove the beauty covers and the coil packs, leads and alternator fuses are sitting in front of you. The MBE ecu is completely unlocked and we supply the associated Easimap software that provides access to the engine data logs and can be used to change parameters such as the fan temperatures. Alternative maps can easily be down-loaded. In other words, all the major difficulties encountered with the original engine have gone.

So, how is the car converted?

At the highest level, this is a drive in, drive out service: we can supply the engine and take care of the everything else. The conversion takes about 7-10 working days to complete and this is often a good time to carry out other work and inspections. The engine specification is flexible and either we can source the engine or the owner can. If the engine is supplied by the owner, we have detailed a checklist describing what we expect the engine to come with. Some parts of the original TVR engine are used but the 'old' engine can be sold to reduce the overall cost.

If the owner has the time and resources to do some of the work himself, such as removing the original engine, this will also reduce costs.

Will the transmission cope?

The main concern is the gearbox. For power below 400 bhp, the gearbox will experience similar power levels to those generated by the original engines. Between 400-450 bhp, the gearbox may be a weak link — but a lot depends on the driving style and activities that the car experiences.



Above 450 bhp, we would recommend upgrading the gearbox to a stronger specification, such as the CTS/Quafe version, which is capable of supporting torque levels in excess of 600 lb/ft. This upgrade is a straight plug-in replacement and can be done at any time — so one option is to keep the standard gearbox and upgrade only if necessary.

How does this affect my insurance?

Your insurers will obviously need to be informed as this is a modification — but Steve has not experienced any problems in getting his LS1 cerbera insured.

What about servicing?

We recommend that servicing is still carried out per the TVR schedules because servicing is not simply an oil change. However, the costs will be lower as the AJP related work is not required. No more expensive tappet adjustment or throttle balancing. Any other maintenance work will be cheaper because of the improved access. For example, the engine does not need to be 'half disassembled' just to replace a fuse or plug lead. Even removing the gearbox is quicker.

What about spares?

LS engine spares are available worldwide from General Motors outlets. Numerous upgrades are also available. As the engine effectively bolts into the car, the rest of the car uses the standard Cerbera spares.

Which cars can be converted?

Any V8 or Speed Six engined Cerbera is a suitable candidate. We have also done some preliminary investigations and believe that this conversion can be done on Tuscans and later cars as well.

Will you provide a conversion kit?

There are no plans to do so because of the problems in supporting it due to the many variations involved and the level of knowledge needed across many electronic and mechanical disciplines.

Sounds great but how much will it cost?

A ball park figure is about £7k + VAT including the engine — but please bear in mind that this does depend on the engine specification and currency exchange rates. If you wish provide your own engine, we can supply a checklist to ensure that it is suitable for the conversion. Either way, you retain the old engine which can be re-sold to offset some of the costs. A scrapped AJPV8 might be worth around £1k just for the parts. A running engine might realise £2k-£3k. The costs can be further reduced by supplying the car with the AJP engine already removed.

Where can I get more information?

Contact us on +44 (0)1908 375537 or via email to ask@shengltd.com



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