

# HEAD TO HEAD

## COMPONENT OR SUPPLY CHAIN?

**Jon:** Maintaining a 10-year old TVR is excellent practice for editing this title. This month's unexpected obsolescence, sourcing and remanufacturing challenge relates to the starter circuit. Like any automotive company, when TVR designed the Cerbera it chose a combination of commercial off the shelf (COTS) and bespoke engineering which spices-up the component purchasing process.

Spinning a 4.5 litre V8 into life requires a reasonable amount of torque, thus demanding a high current starter motor power cable. Replacing this cable offered the opportunity to upgrade the design. From the battery, the cable passes close to the exhaust manifold then dives down behind the engine block to the starter motor mounted on the bell housing. Thus, a flexible, high current, heat resistant cable was required.

As an electrical component, I wasn't automatically assuming an electronics title would provide the ideal sourcing environment for such a cable. However, I was pleasantly surprised to find some regular advertisers appearing on my potential suppliers list. Recognised, quality brands quickly rose to the top.

At this point, the magnitude of the sourcing issue became apparent. I needed: a special cable; preferably from stock; available in small quantities; plus suitable connectors; and a crimping facility; all backed by knowledgeable staff.

As I write this Head-to-Head article I'm contacting potential suppliers and gathering information, data and pricing. This process has reemphasised that although the cable is important, it is the supply chain itself that will determine the ultimate outcome.

So, what's most important, the component or supply chain? Lets ask DMTL's Patrick Leahy.

# HEAD

**Patrick:** The example given regarding the TVR Challenge suggests a number of viewpoints.

Design is the first resolution at a component level. It could be suggested that the original application and design could have been more effective. Knowing the location and potential stresses likely on the part, a more robust original equipment part could have been utilised, and based on original manufacturing volumes and potential replacement volumes a reasonable price for a 'standard' part would have been achieved.

Moving on to sourcing, effective product knowledge is absolutely essential. It is, however, impossible to have an extensive knowledge, other than in niche areas, without the full support of component manufacturers/suppliers, who should constantly be educating and providing technology improvements and market strategy.

It is also the case that suppliers who resolve customers problems/shortages are often also the most dogged in their determination to resolve shortage or obsolescent problems, display a willingness to be flexible and do not necessarily target immediate profit in assisting the customer in overcoming their problem.

Both components and supply chains are constantly evolving mediums, especially at this time.

So no conclusion as to the more important, component or supply chain, but the suggestion that the original design parameters, and equally importantly, the subsequent opportunities to improve design of component are at the centre of resolving such situations.

Hope that you get your TVR started again and that it is as reliable as the two that completed Le Mans a few years ago, but without the cost....