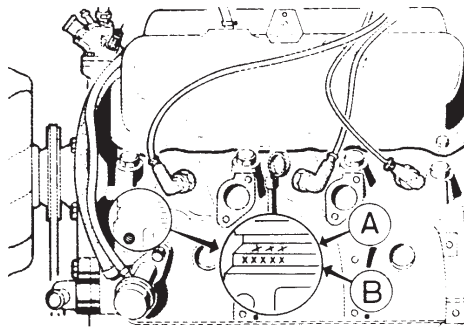
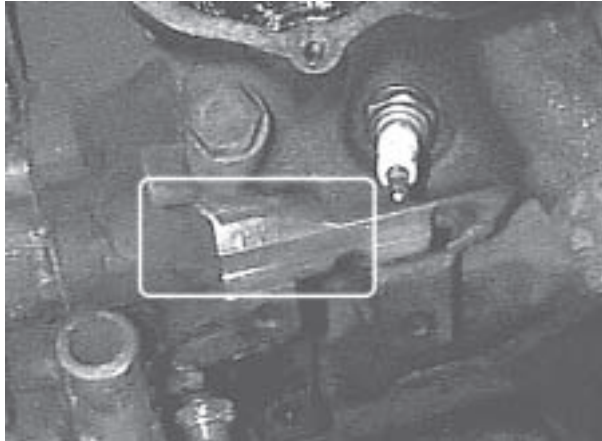


made. For Tasmin FHC Series 1 and 2 cars with the 4 speed or automatic gearbox and made up to 1983, the valve seats are not hardened, so these cars cannot be run continuously on unleaded fuel. TVR recommend that every fourth tank of fuel is leaded. When leaded fuel disappears from the market, these engines will require the heads to be converted or the use of a suitable additive to ensure that valve head recession does not occur.



**A = Engine code**  
**B = Engine number**

*The location of the engine code and number on a V6 2.8 engine. (TVR Engineering)*

For Tasmin cars made from 1983 onwards and the 280i models, the situation is different. These may be run continuously on unleaded fuel, providing they have been fitted with the later version cylinder heads with hardened valve seats. These can be identified by looking for the letters D or E that are stamped on the cylinder head exhaust flange upper face, near the middle spark plug. This mark can be very light and covered with grime. Cleaning with some solvent will often help reveal it. Check both sides to ensure that both heads are unleaded unfriendly. Note: it is easy to confuse this mark with the TVR engine number and code which are located on one of the 4 upper flange faces and may also contain a letter D. The engine number is typically below the engine code, which also causes some confusion. The TVR engine number should contain the letters WPP and, from 1985, also has the letter D added. The engine code should start with PR (standing for 2.8 litre fuel injection). If there is no letter, assume that

the cylinder head does not have hardened valve seats and will need a tank of leaded fuel or an additive as per the earlier cars.

It is worth checking this very carefully: it is not unknown for engines or just the cylinder heads to have been replaced and so a car that should be fine on unleaded may not be.

To cope with the lower octane, the ignition timing should be adjusted in all cases to 9° BTDC from the normal 12° BTDC. For super unleaded, no timing modification is necessary. US cars should have the ignition already set to 9°.

## 2.0 litre Pinto engine

These engines cannot be run continuously on unleaded fuel and will require conversion or a lead replacement additive. For premium unleaded, the timing should be adjusted to 4° BTDC from the normal 8° BTDC. For super unleaded, no timing modification is necessary.

## Rover V8 engines

All the V8 Wedges can run continuously on unleaded fuel. They have the hardened valve seats and the only modification they need to run on regular unleaded fuel is to have the timing adjusted from 8° to 4° BTDC.

TVR issued a bulletin on the use of Super Unleaded in the Rover based V8 engines several years ago which I have reproduced here:

"Since the above service bulletin was mailed out, a further grade of unleaded petrol has been introduced by several of the major petrol companies.

This new grade, having a minimum octane rating of 98 RON is being marketed as S plus, Premium Unleaded etc. Although not fully tested by TVR, initial trials have suggested that, due to the octane increase from 97 (standard leaded 4 star) to 98 (high octane unleaded), there may be an advantage to be gained from using this fuel with certain TVR models able to cope with lead free petrol.

With the gradual reduction of lead content in petrol, and consequently octane rating, it has become increasingly necessary to reduce the degree of ignition advance during vehicle service. This has been particularly evident with TVR Vee 8 models, where in practice, very few will actually run detonation free with the standard idle advance setting of 8° BTDC. The octane 'factor of safety' that once catered for production tolerances in compression ratio, distributor backlash and combustion chamber deposits etc. now no longer exists. Hence the variation found between the amount of idle advance individual cars will stand before the onset of detonation.

Due to the fact that all TVR Vee 8 engines can be used safely on unleaded petrol (350, 390, 400, 420, 450) there may be a performance and economy advantage to be gained from using the new high octane lead free petrol.

As the new grade becomes more widely available,