# Rolls-Royce Owners' Club of Australia Library

# LPG and Rolls-Royce

by John Edwards (NSW), October 1999

Did you know that Rolls-Royce motors are run on LPG on the test bench at Crewe because it is a cleaner running fuel? I was told this by Dave Thomas who was once the trouble shooter for Crewe with dealers throughout Britain.

I know of three other Shadows fitted with LPG. Two are wedding cars and the other is owned by member Tony Richardson, a very experienced motor mechanic who is very enthusiastic about LPG - as am I.

When I became the proud fourth owner of SRH16549, in 1990, I was assured by the late Bruce Ross that the 75627 miles on the clock were genuine.

The Gas Man at Kensington, Sydney (now at Alexandria, Sydney) fitted an Impco LPG system for me at 85,800 miles. Since then, I have clocked up just on a further 108,000 miles without any problems from the LPG system. Less than 4000 of these miles were on petrol. Because of too little use, my SU petrol pumps packed it in on the lonely stretch in western NSW between Hay and Balranald, but I simply switched back to LPG and went happily on my way. The NRMA man at Balranald advised me to do about a hundred miles in each thousand on petrol to keep that system in good working order. According to him the points in the SU pump build up plaque if not used, causing them to overheat and cut out. Since taking this competent man's advice I have had no further problems with the SU pumps.

#### Starting the motor

Until recently I always switched back to petrol for the first start of the day to achieve instant firing. Because the motor had to suck LPG from the tank it took seven or eight revolutions before firing occurred. Tony Richardson introduced me to Tony Schott at Gaspower Automotive Services of Warners Bay near Newcastle who had done two R-R LPG conversions for him. Tony Schott fitted a Fast Start Valve to my LPG system, and I can now get instant firing from either fuel. Incidentally, the system fitted by Schott is much more compact than the Impco system fitted to my car and has given "Richo" no trouble on the two Shadows he had it fitted to.

#### **Power**

There is no noticeable difference in power between LPG and petrol except on really steep climbs of about 1 in 6 or less - one does not encounter many of these. On my test hills either side of the Mooney bridge along the Newcastle expressway the Shadow will gain speed on either fuel if asked. Because LPG runs a few degrees hotter than petrol it helps to switch back to petrol for long climbs on *very* hot days e.g. Mount Ousley near Wollongong.

## Economy

Fuel consumption is higher on LPG than petrol, but this is very well compensated by the lower cost of LPG, usually half the price of petrol or less. The cost saving on LPG against petrol is about 40% for the way I drive and the mileages I do. It is my policy to drive at or below the speed limit. As a means of monitoring engine performance and getting early warning of potential problems, I have always logged petrol consumption on every car I have owned.

The following fuel figures are averaged over the 108,000 miles done since LPG was fitted. Petrol figures in brackets.

- CITY 11 mpg (12)
- TOURING at 100-110 kph 13mpg (16)
- TOURING at 80 kph 14.3mpg (11)

A run I have done many times, from coastal Sydney to Bowral in the Southern Highlands, gives a good idea of LPG mileage uphill versus downhill. On the return journey the mileage has consistently been 3mpg better. So don't go there - just come back!

## Range

The LPG tank is in the boot and the biggest tank I could fit between the wheel arches was 54 litres, of which 52 litres can be used. This gives an effective range of 140 to 150 miles. A much bigger tank can be fitted where loss of half the boot space is not a problem. The enforced break to refuel every couple of hours or so can be considered a safety factor against fatigue, especially for those in my age bracket.

## **Engine wear due to LPG**

Nonapparent. Due to a wrong diagnosis of the cause of water loss, the heads were taken off the engine at 127,000 miles, i.e. 42,000 miles after LPG was fitted. The engineer who checked the head and ground the valves (I replaced from another cause) commented that there was no damage from using LPG, but the engine was much cleaner than he would have expected had petrol been the main fuel. Oil consumption has hardly varied in the last 50,000 miles and decreased before then after I changed to a special oil called Tough Country Super that I buy direct from the Brisbane manufacturer. This oil also makes the engine run quieter.

#### **General comments**

The Gas Man charged \$2,000 to fit the Impco system in 1990 and told me that it would cost "more" to convert the next Shadow if it had Cruise Control because of having to fiddle about the obstructive diaphragm of the Cruise Control. There was no Cruise Control (sorry R-R, you call it Speed Control) on the earlier Shadow he converted. The much less cumbersome system fitted by Tony Schott would not have this problem. Probably the best recommendation I can give Tony is to tell readers that I regard him as the John Vawser of Gas. Anyone thinking of converting to LPG would have nothing to lose by talking to Tony on 02 4956 6041.

There is a switch out of sight under the dash for changing from one fuel to the other. If this switch is placed in the neutral position when leaving the car, the motor will start on the small amount of fuel left and then cut out. This gives some measure of protection from a thief who does not realise that the car is dual fuel. LPG is so readily available that the only stretch where I need to rely on petrol for a short distance is between Hay and Balranald when going to Adelaide. Victoria is no problem at all nor is Queensland up to Noosa, which is the furthest I have been. Booklets are available from service stations showing where LPG is available throughout Australia. I understand that LPG causes less pollution than petrol.

I can thoroughly recommend LPG as a safe, reliable & economical fuel.