## TO BRAKE OR NOT TO BRAKE!

It all started last year. (2004) Jackie complained that I was trying to kill her by shooting her through the windscreen, no not from the outside in but from the inside out by excessive and violent braking! The problem was that when travelling at slow speeds the brakes would snatch and the car would stand on its nose, hence the complaint from the front passenger seat, the said occupant being firmly of the opinion that I had done it on purpose! When not travelling slowly and under light braking the problem materialised in a slightly different form with the brake pedal pushing back against my foot in a pulsing movement. I tried my standard first remedy but it did not go away, if anything it was getting worse. We had the brake drums off and cleaned them out, checking for cracks or ovality. We jacked up the back wheels, started the engine, engaged top gear and applied the brakes. No problem. Road test and there it was again.

Then a chance conversation had me thinking about gearbox oil levels. I had noticed that when the car came back from a service last year the gearbox was overfilled with oil and had indeed remained so during the whole year as I was unaware of any problem that this might cause. Without wishing to teach anyone's grandmother the art of egg sucking but possibly for the benefit of those owners of post 65 cars, Henry Royce devised a means of power assisted braking by connecting a servo to the gearbox. This would only work when the back wheels were turning thereby making it very difficult to lock the front wheels and lose steering. If the gearbox is overfilled oil can find its way onto the servo discs with unpleasant results. I took the opportunity to talk to some experts while at the Hunt House on two occasions and the general opinion seemed to support my fears.

I voiced my concern to the 'culprit' who had overfilled the gearbox which resulted in the free work mentioned previously. The servo was removed and dismantled and was completely free of oil on the plates and particularly the friction lining. However, the friction lining was wavy! At first we thought that this could be the problem but the more I thought about it the more I became convinced that the cause lay elsewhere. The friction lining was rubbed down flat and the servo re-assembled and replaced.

In addition to the servo there were some other things which needed to be done to the car not least the rear offside wheel bearing, which was noisy. On removal it was found that the bearing was in an advanced stage of disintegration. A new bearing was fitted, the car road tested and lo and behold smooth progressive braking. It must have been the bearing all the time caused by the wheel actually moving on the half shaft under braking.

Brakes and oil as a general rule do not mix. I had trouble with my 25/30 owing to over enthusiastic use of the chassis lubrication pump. This is, I understand a problem with the pre 1939 cars which does not affect the post 1945 cars.

I am open to correction on this.

## **Martin Vinson**