

FAILED TO PROCEED – a cautionary tale

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On the Saturday evening before the club event at Sion Hill Hall, I decided to wash off my faithful Shadow ready for the morrow. I reversed the car out of the garage and sat a few minutes with the engine running while I checked the state of the interior, oil pressure, ammeter etc. It was then that I noticed smoke rising from the engine room! Quick as flash I switched off, released the bonnet catch, and leaped out of the car. On opening the bonnet clouds of smoke rose from the offside of the engine, however, on peering underneath the car I was amazed to see that the smoke was in fact oil vapour rising from the already hot exhaust pipe and that a large and rapidly growing patch of oil was dripping off the exhaust onto the driveway. What I could not see was where the oil was coming from. It was obvious that the Shadow was going nowhere the next day, and so it was that Norma and I went to Sion Hill Hall in our second car (incidentally a first class day out deserving of a better attendance – but that is another story). My thoughts kept returning to the Shadow but I simply could not understand how oil could reach the exhaust aft of the engine.

When we returned home, another surprise awaited us. The spilt patch of oil had disappeared from the driveway, as had the trail left when I drove the Shadow back into the garage. With surprising perception Norma remarked that it could not have been engine oil, “engine oil does not go away by itself it just sits there making a mess until it is cleaned up”. The voice of experience! But if it was not engine oil, what was it? Certainly not water, the engine ran normally, there was no indication of a blown gasket, and the coolant level had not dropped. Could it have been hydraulic fluid? A thorough inspection of the hydraulic system revealed no leaks of any kind. In any event the leaked oil (now caught in a tray beneath the exhaust) appeared to have a dark red colour whereas hydraulic fluid is colourless. A dark red colour! Gearbox oil! But how could the gearbox spray oil onto the exhaust forward of its position? With no sign of any blown oil seals, this remained a mystery. I turned to my workshop manuals without much hope, and had almost given up when I noticed a sketch showing a flow of oil from the gearbox to an oil cooler in the bottom of the radiator and return. A quick inspection in the garage revealed that the once smooth tubes carrying this flow and return were so corroded as to more closely resemble a wood rasp! It was also apparent that the tubes were very inaccessible. However, I scratched about with an old screwdriver, dislodging several pieces of rust into my eyes. On starting up the engine it was at once apparent that the slow drip of oil had now become a torrent! I had found the problem!

But having found the problem, how to put it right? Clearly the car could not be moved under its own power. I should have to pay for its transportation to a repair garage, or do the job myself. It seemed simple enough. Undo four unions, release the tubes from the four straps holding them to the sub chassis, and replace with new. I decided that I could do this simple job myself possibly in the course of a weekend.

How wrong can one be! The first requirement was to create sufficient space in which to work. Call me a pessimist if you wish, but not until I had the front end raised and supported on two hydraulic jacks, one screw jack, and two axle stands did I feel confident to crawl under the car now devoid of its offside front wheel. It was at once apparent that this was not to be the simple job I had expected. Over a period of twenty years and one hundred thousand miles that front wheel had thrown a corrosive mixture of road spray and dirt onto the rear unions so that they might as well have been welded to the tubes. Try as I might, in the limited space beneath the car I could not release those unions. Furthermore, self-tapping screws held the straps securing the tubes to the sub chassis, but they had long since changed into unrecognisable blobs of rust. Totally impossible to remove. Round one to the Shadow!

I retired to lick my wounds (literally) and to exercise the ‘little grey cells’. Logically the pipes needed to be replaced, but if they could not be removed by normal means perhaps the recalcitrant unions could be cut off leaving a short length of metal pipe to which new plastic pipes could be clamped. Before embarking on this course of action I needed to seek advice from someone more knowledgeable about cars, and particularly Rolls-Royce cars, than myself.

I contacted Gordon Blacklock. He agreed with the course of action I proposed and made several useful suggestions. I obtained a suitable length of plastic pipe (though not the reinforced pipe I would have preferred), worm drive clamps, and I was ready to begin round two. It was then that I discovered that it takes considerable courage to attack one's beloved Rolls-Royce with a hack saw! However, gritting my teeth the foul deed was soon done. Plastic pipes were clamped on (not without some difficulty and much swearing) and the gearbox refilled with Dexron. I started up the engine and crawled underneath to new the 'repair'. No leaks. I left the engine running whilst I collected up my tools. Better have another look now that the engine had warmed up. Horror of horrors! The new plastic pipe passed within a couple of inches of the exhaust and was therefore subjected to extreme heat. It had not only sprung a light leak at that point but under the effect of the heat had developed a huge aneurysm, which threatened to burst at any moment. Clearly my 'repair' had failed. Round two to the Shadow!

More exercise for the 'little grey cells' resulted in the conclusion that the genuine Rolls-Royce article would have to be fitted. Now that the pipes had been cut the unions could be removed complete with the short length of pipe still firmly 'welded' to them. The straps holding the remainder of the pipes would have to be removed and if the screws holding them could not be undone, they would have to be cut off. In this way three of the straps succumbed to having the screw heads ground off using a small grinder. The fourth and last strap however was in the most inaccessible position behind the front suspension leg and coil spring. I could not reach it with a grinder or drill. I had eventually to cut the strap with a hammer and chisel. Introcar supplied the replacement pipes in record time once we had positively identified what was needed. It now only remained to thread the pipes into their allotted place and do up four unions. Simple. Wrong again! It took the whole of one day in trial and much error to get those oddly bent pipes into their correct place. Even then, the unions were very difficult to connect – either I have a non standard Shadow or the pipes had been subjected to various additional bends and tweaks after leaving the factory and before arriving in my garage. So it was that at 5.00pm on 7 August I was refilling the gearbox (again) with the new pipes now in place. A quick road test, an equally quick wash off for the Shadow (it took longer to clean myself up) and we were ready for Harewood House the next day.

When was the last time you checked your car for corroded pipes? I was lucky in that my problem occurred at home, but if it had occurred en route somewhere.....?

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