

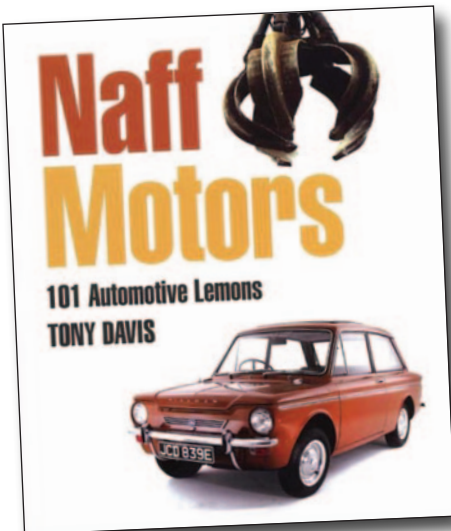
## The Hillman Imp – Beware of Charlatans!

Colin Valentine, Rufforth, Yorkshire

*The following article appeared in the newsletter of the North East England Classic & Pre-War Automobiles magazine, NECPWA News, 2017 No. 6. Unusually it has an article on the Imp. Written by Richard Mundell, it makes interesting reading...*

A car that gave me great pleasure was an Imp I owned in 1964. It was sad, therefore, to hear Imps rubbished in a recent TV programme, *The Cars that made Britain Great*. The programme was made, one might suppose, to celebrate British car design over the years. To do so, it followed the depressing custom of parading ‘celebrities’ along with experts. There was three of each. The celebrities consisted of a cricketer, a hill walker and a trendy poet. The journalistic experts, one pompous and two snide, were united in an apparently complete lack of personal experience of the Imp. Such experience was confined to the poet who had a mate who had one, and dismissed it twice as ‘crap’ because it was not a ‘babe magnet’. The general message was that the Imp was a small comical load of junk and the general impression was of ignorance. Given the blanket condemnation one wondered what the poor old Imp was doing in a programme about cars that made Britain great anyway.

Rather more specific in their abuse are the several books that have been published on unconventional or unsuccessful cars. Knocking such motors forms a convenient refuge for the journalistic charlatan; they can pour scorn on them and get paid for it often without ever having driven them and without any appreciation of the engineering that has gone into them. Some of these books are *What not to Drive*, *Crap Cars*, *Naff Motors* and *The Worst Cars ever sold in Britain*, all of which are, or have been, available in Waterstones.



In the last of these, the author, Giles Chapman, predictably includes the Imp. One of the reasons for the Imp’s ‘failure’ (440,032 were built) he says, was the ‘poor design’, others were the ‘high price’ and the ‘Scottish workforce’. At the back of his book he includes some league tables in which groups of the 140 cars in the book are ranked on ugliness, speed both high and low, unreliability and other qualities. The Imp came third in the ‘Daftest Features’ table and the daft feature quoted is ‘Engine in the back like a Beetle but without VW’s high quality’. It seems that for Chapman it is an unforgiveable mistake to locate the engine of a car in the back. Inevitably the Mini is quoted as proving that the way forward was front-wheel-drive.

His other main complaints are of high price and unreliability. Criticism of the Imp’s reliability

centred almost entirely on three defects. Experience with long Bowden cables on other rear-engined cars led the Rootes engineers to design a pneumatic throttle control system. When it didn't leak this provided light and sensitive control of the engine but unfortunately it was not developed to the required degree of reliability and was soon replaced by a cable. My Imp was an early 1964 one but already it came with a cable to the carburettor that certainly worked fine. The Solex carburettor was also the site of the second remembered defect. It was fitted with an automatic choke that was prone to fail and could do so either on 'rich' or 'weak'. The former required attention but mine failed on 'weak' so that once started the car could be driven normally. Happily the carburettor also incorporated an accelerator pump, a couple of kicks on which would get the engine to start in the coldest weather. I left the choke alone. The third problem was overheating, which has usually been attributed to inadequate coolant volume. Later cars had an increased volume header tank. Although my car had the small header tank it never gave this trouble and, indeed, I can say that the automatic choke failure was the only trouble of any sort that I experienced with it.

Essentially the charges of high price, low quality and inadequate development arise from the major misfortune that befell the project. The wrong people built the cars in the wrong place at the wrong time. Instead of making them in Coventry with the experienced Rootes workforce, politicians in Westminster had the dandy idea of building a factory near Glasgow to employ redundant workers from closing Clyde shipyards. The whole enterprise was rushed to get the cars out to suit the political will. The timescale for development was inadequate, the labour relations with the inexperienced workforce were appalling and the costs were further inflated by running trains back and forth with components going north and completed cars going south.

Let us acknowledge that in spite of its unfortunate manufacturing history the Imp is a great little car. For Chapman the rear engine condemned the car to inevitable failure. Predictably he mentions the BMC Mini as 'proving that front-wheel drive was the way ahead for tiny roomy cars'. That concludes the discussion as far as Chapman goes. In fact a comparison of the Imp with the contemporary Mini 850 shows some winning features for the Imp:

		IMP	MINI
<u>Engine</u>			
Bore	mm	68	63
Stroke	mm	60	68
Capacity	cc	875	848
Compression Ratio	:1	10	8.3
Power	bhp	39	34
at	rpm	5000	5500
bmp at max power	psi	105	103
<u>Engine + transmission weight</u>	lb	176	330
<u>Drag</u>			
Cd		0.385	0.42
Frontal area	Ft <sup>2</sup>	18.5	17.12
Power to maintain 70 mph	hp	20.36	20.55

**A very attractive Imp Super at Beamish, 2015**  
**Opposite: Early interior, later models had an inferior instrument arrangement**

*Photos: Richard Mundell*

The Imp has the rear engine advantages of excellent braking due to forward weight transfer, good traction from the rear wheels, light and accurate steering



because no drive loads are present and quiet cruising because the engine noise is left behind to a large extent. There was criticism of sensitivity to side winds. This is worse in a rear-engined car because the centre of gravity is aft of the lateral centre of pressure but the tendency is slight in the Imp because the engine and transmission weight is so small; at 176 lb it is only just over half the weight of that in the Mini.

Chapman's 'quality' comment suggests that he thinks that the VW Beetle was a superior car to the Imp. I came to the Imp directly from a 1960 Beetle and can confirm that it was slower than the Imp, thirstier than the Imp, scarier in corners and scarier in side winds so the better paint job had a lot to make up for. I also had 850 cc Minis before and after the Imp and can say from personal experience that the quality of the Imp was better. In all the nostalgia about Minis a lot is forgotten, for instance what renowned motoring journalist LJK Setright described as 'the ramshackle interior', the thin badly fitting carpets, the cardboard trim and the long wobbly gear lever. Because of its tiny dimensions the driver of the Mini has to adopt the foetal position. The single instrument is by his left foot flanked by unreachable switches. In the Imp there is adequate foot-room for driver and passenger and the instruments and controls are close in front of the driver. There are wind-up windows and the seats are firm and comfortable on long journeys. I do not remember having any criticism of the interior or, for that matter, the exterior. A particularly good feature is the opening rear window that allows you to put your shopping in a shallow trench behind the rear seat.

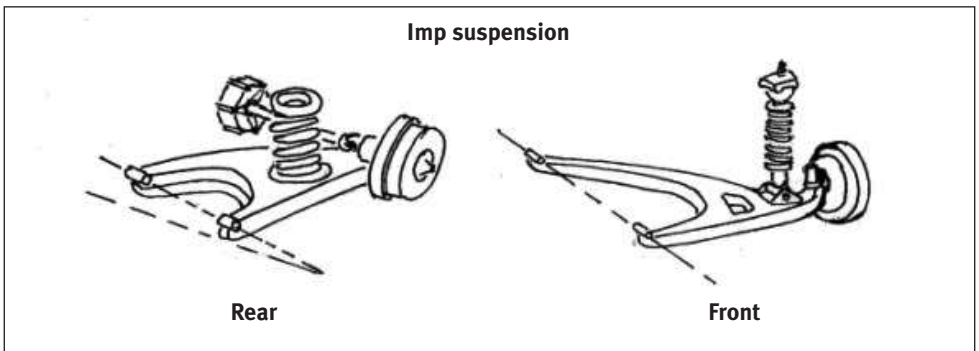
These things count for little, however, against the cherished belief of some modern journalists that all rear-engined cars are dangerous. Much of this prejudice stems from the attacks on the Chevrolet Corvair by the lawyer (not engineer) Ralph Nader and his book *Unsafe at any Speed*. The Corvair, like rear-engined cars from VW, Skoda, Renault and others, had swing-axle rear suspension. This is the simplest way to drive rear wheels from a transaxle but has the disadvantage that the roll centre is high, which gives high weight transfer load to the rear wheels while cornering so that they try to tuck under the car and flip it on to its roof. The original Corvair design incorporated an anti-roll bar to minimise this but the GM cost accountants had it deleted to save money and the combination of oversteer and slow steering gave early cars a poor



reputation for dynamic safety. The anti-roll bar soon came back, together with other improvements to the suspension. These predated Nader's 1965 book by some years but mud sticks and the situation was only partly retrieved in 1972 when a government-backed industry

committee essentially discredited much of what Nader had written and stated that the Corvair's handling "does not result in abnormal potential for loss of control".

The Imp came to the market a couple of years before Nader's book was published and could have been held as a shining example of the nonsense of such blanket judgements. It was developed by some talented engineers led by Mike Parkes (who would later be not only a grand prix driver for Enzo Ferrari but one of his development engineers as well), Tim Fry and, specifically on the suspension, Harry White. The car has basic, swinging arm front suspension but superior rear suspension using semi-trailing wishbones. The roll centre at the front is high and that at the back is low, a combination that removes much of the weight transfer load while cornering.



Ignore the journalistic charlatans, the handling of the Imp is really excellent. There is just enough oversteer to make the little car seem eager to be driven fast through a series of bends. In fact by adjusting the tyre pressures it can be made to understeer or oversteer, or a good driver can make it do either at will. It is great fun.

Just before Chrysler took over Rootes in 1967 Tim Fry demonstrated the car to a Chrysler engineer. As they approached a roundabout the American asked, "Do these things understeer or oversteer?" Fry said, "Well, I'll show you. You can make it understeer like *this!* Or you can make it oversteer like *this!*" After that there was no more conversation.