

Vauxhall Classics No. 5 – A22 Infantry 'Churchill' Tank

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T.17677. Vauxhall Motors Ltd., designed and put into production the famous 38-ton Churchill tank in exactly one year. Picture shows a pre-war Vauxhall '10' by the side of one of these monsters.



In feature No. 5 in a series looking at significant Vauxhall vehicles through the decades, this week we show how, when faced with a national crisis – and in this case, the Second World War – the company could turn its hand to manufacturing almost anything. Even a tank...

(All information and photographs from Vauxhall).

VAUXHALL'S A22 INFANTRY 'CHURCHILL' TANK

Today, we see how engineering innovation and adaptability can be key to saving lives, but



this is not without precedent. Eighty years ago, Vauxhall's engineering and manufacturing facility in Luton was held in such high esteem by the British Government, that it was set an almost impossible task: Design and engineer a 38-ton infantry tank within 12 months.

In fact, Vauxhall had already developed an engine for an aborted Harland & Wolff tank design. Staff worked night and day, through weekends and holidays to design and produce a flat-12, 21-litre engine, achieving the required 350 bhp at 2,200 rpm mandated by the War Department. Incredibly, the first engine ran after just 89 days.

Working to the War Department's tight brief for the tank itself, Vauxhall Assistant Chief Engineer, Harold Drew, led a taskforce that brought the A22 Infantry Tank – later known as the 'Churchill' – from first design sketch to working prototype in the space of a year.

Agility was favoured over speed for the Churchill, and its clever Merritt-Brown steering system used epicyclic gears to regulate the tank's track speeds during cornering – an early form of torque-vectoring! – rather than by braking one track, which would slow the tank's progress. A happy coincidence of the linked gearbox/steering system was that the Churchill could turn on the proverbial sixpence.

After testing was complete – much of which was done at the Luton Hoo Estate, and at one point attended by the Prime Minister, Winston Churchill – an initial order was placed for 500 Churchills, with the first seeing service in 1942. A further 5,000 units were built before hostilities ended.

This slideshow requires JavaScript.

As well as the Churchills, Vauxhall also produced for the war effort: Five-million Jerry cans, gun mounts, four-million Venturi tubes for rocket launchers, steel helmets for the forces, and 5,000 6lb shells per week.

Specification



Engine configuration:	12 cylinders, horizontally opposed
Capacity:	21 litres
Power:	350 bhp @ 2,200 rpm
Transmission:	4-speed epicyclic gearbox
Operational range:	56 miles
Top speed:	15 mph

VAUXHALL MOTORS

They tell us:

Vauxhall Motors started making vehicles in the UK in 1903. Today, as the oldest and most familiar of Britain's automotive manufacturers, its philosophy is to build vehicles that are relevant to all. Vauxhall's two manufacturing plants in Ellesmere Port and Luton produced 206,000 cars and vans in 2018, and its sales accounted for nine per cent of the UK market.

Vauxhall has been a Groupe PSA brand since 2017. By 2024, each of its models will offer an electrified version, part of the company's PACE! plan to become sustainably profitable, global and electric. www.vauxhall.co.uk

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