

## The Daimler 'Dingo' Scout Car

With hindsight, some historians have been kinder to Neville Chamberlain than was the case in the last 18 months of his life. The consequence of the appeasement of the Munich Agreement gained Britain valuable time to rearm. In 1938, the War Office issued a specification for a scout car. Three British motor manufacturers: [Alvis](#), [BSA Cycles](#) and [Morris](#) were invited to supply prototypes. The Morris vehicle lacked speed; the Alvis was fast, but had a high centre of gravity; its vehicle was named the Dingo. Ultimately the contract went to BSA and thence to Daimler, their car manufacturing division.



As a two-man fast and compact armoured car, the Dingo enjoyed great success. It was reasonably well protected for its size with 30 mm of armour at the front and 12 mm along the sides. The Dingo is powered by a 2.5 litre 55 hp Daimler OHV straight six petrol engine which was located at the rear of the vehicle. This gave the vehicle a top speed of 60 mph at 4,200 rpm, and a range of 200 miles. There are several features in the design of the Dingo that are recognisable in its successor the Ferret. The transmission included a Wilson pre-selector gearbox, a fluid flywheel, propeller shafts (protected inside the channels of the chassis sections giving the Dingo its very low profile), five forward and reverse gears, an H-drive differential, bevel boxes, Tracta CV joints and independently sprung wheel stations. The vehicle is 10 ft 9" long, 5 ft 1" tall and 5 ft 9" wide with a 10 inch ground clearance, although it could slide on the flat armoured plate under the chassis in deep mud, and was vulnerable to mines. Its unladen weight is 2 tons 12 cwt, or 5,824 lbs (2,642 kg) with a net power/gross weight ratio of 17.46 bhp/ton.

The driver sat on the right at a slight angle (to aid reversing) in the hexagonally-shaped fighting compartment, while the commander/gunner sat on the left in a swivel seat that enabled him to turn to operate either the No. 19 radio set or 0.303 BREN light machine gun which protruded through a front aperture in the hull. Twelve spare magazines were carried. The BREN could be replaced with a .55in Boys Anti-Tank Rifle. Both weapons were augmented by personal weapons carried by the crew (such as pistols or submachine guns). welded plates comprising the hull were angled to give maximum chance of small arms rounds glancing off the hull rather than penetrating it. The armour wasn't effective against heavier calibre weapons. The hexagonal fighting compartment, together with a full-width stowage box at the front of the Dingo gives this vehicle its uniquely recognisable form. The front of the hull is fitted with two hinged lookout flaps, the larger one being for the driver, the other for mounting the BREN or Boys A/T rifle. Additional flaps in the side of the hull and to the rear allowed for reversing away from enemy contact.

Five variants of the Dingo were produced. Initially the early Mk I Scout Cars had steering on all four wheels, which gave it an extremely tight turning circle of 23 feet (7.0 m) but inexperienced drivers found the vehicle difficult to control, so the rear-steering was deleted in later production at the cost of increasing the turning circle to 38 ft (11.6 m). The roof on the Mk I slid over the fighting compartment. The Mk IA followed with the only change being a folding roof. The Mk IB featured a new armoured radiator grille and revised engine cooling. The major changes came with the later Mk II models. The four-wheel steering was dropped in favour of front axle steering, and the chassis strengthened. The Mk III dispensed with the roof entirely, having only a canvas cover, to save weight and allow more crew freedom while introducing a new waterproof ignition system.

A spare wheel was considered unnecessary because of the nearly solid 7.00-18 RFE run-flat tyres fitted to the vehicle, rather than pneumatic types which were vulnerable to punctures. The fuel tank was contained within the armoured fighting compartment for protection.

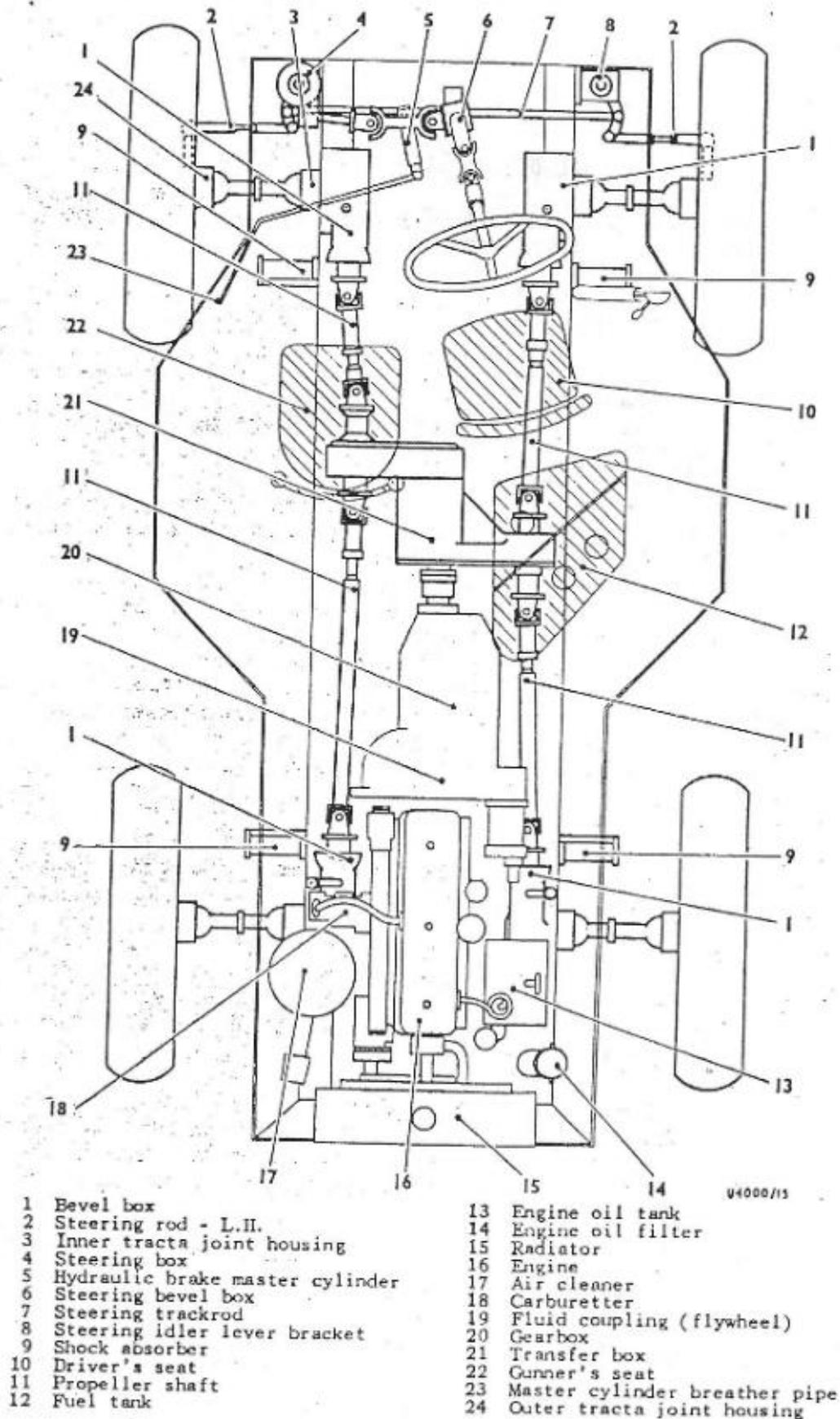


Fig 3 Layout of main components

During WWII British factories could not keep up with demand, so a version of the Dingo was made in Canada. At their works in Ontario, Ford (Canada) took on local production, these being formally designated "Car, Scout, Ford Mark I", but popularly called the 'Lynx'. Ford introduced its own in-house powertrain and suspension system which created a vehicle some 12 inches taller and one less popular than the British design. While the engine was much more powerful, the gearbox and suspension were inferior. The type entered service in 1943.

The Dingo was initially manufactured in Coventry under a contract for 175 vehicles from May 1939. It is widely considered one of the best-ever armoured vehicles produced for the role required of it, and significantly contributed to the subsequent success of the Ferret. Total production figures were 6,626 for the Dingo (all marks) 1939–1945; and 3,255 for the Lynx 1942–1945. By 1968 all Dingo scout cars had been withdrawn from British service.

The Daimler armoured car, which can be seen in the background of the photograph taken at Bovington above, evolved from what was essentially an enlarged Dingo fitted with a turret and quick-firing (QF) two pounder gun as main armament with a co-axial 7.92 Bessa machine gun. There was a roof pintle mount for a light AA Bren machine gun. The armoured car had a crew of three, rather than two, as for the Dingo: the driver at the front, and commander and gunner who took their places inside the cramped turret, just large enough to allow the recoil of the light 2-pounder gun. Uniquely, the commander could drive the car in reverse, sitting in a separate rear-facing seat using his own steering wheel and controls. Fifty two 2-pdr shells and 2,500 rounds for the Besa LMG were carried inside the turret. Just as with the Ferret, the turret was manually operated. Problems with the complex transmission, amplified by the added weight of the vehicle delayed it entering service well until mid-1941. Daimlers were used by the territorial reserve units of the British Army until the 1960s, outlasting their planned replacement, the Coventry Armoured Car. It was still being used by 11th Hussars in Northern Ireland as late as January 1960.

#### References:

Daimler scout car data sheet:

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Daimler armoured car data sheet:

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Surviving Daimler Armoured Cars [http://the.shaddock.free.fr/Surviving\\_Daimler\\_Armoured\\_Cars.pdf](http://the.shaddock.free.fr/Surviving_Daimler_Armoured_Cars.pdf)  
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Daimler Dingo Tank chats <https://www.youtube.com/watch?v=qbKBvG58ayk>

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