



### History of the Daimler Dingo Scout Car

The **Daimler Scout Car**, known in service as '**the Dingo**' was a light fast reconnaissance vehicle also used in the reconnaissance liaison role during the Second World War.

In early 1938 the British issued a specification for a scouting vehicle, and two companies developed working prototypes for trial and evaluation by the War Office.

Two companies Alvis & BSA entered the trials and these early models were subsequently revised to rectify problems and incorporate improvements.



Photo courtesy of IWM Reference MH-7577  
The competing Alvis-Dingo early prototype



Photo courtesy of IWM Reference MH-7578  
Rear view of the Alvis-Dingo. This shows the original configuration of the 'Dingo' Scout Car before the addition of armour plating to the rear of the vehicle.



The Daimler Dingo Scout Car- Design & Development  
Fighting Vehicles Project – Part Aa1  
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Photo courtesy of The Bovington Tank Museum (possibly from the IWM Reference unknown)  
The Alvis-Dingo early prototype



Photo courtesy of from The Bovington Tank Museum  
The Alvis-Dingo latter prototypes, which was a conversion of the original car  
circa 1939



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After trials were completed the final prototype submitted by BSA was selected.

The vehicle was officially designated **Daimler Scout Car**, but became widely known as **Dingo**, which was originally the name of the competing Alvis prototype

However the actual production was passed to Daimler, which was a vehicle manufacturer in the BSA group of companies.

The Dingo was a small two-man armored car primarily used for scouting and spotting ahead of heavier armored vehicles. Once observed the whereabouts or location of the enemy units could be transmitted back via two separate radio sets.

The A set was for corps HQ communications in voice or Morse code with a range of 20miles and the B set for voice only transmission to other armored vehicles at short range.

It was well protected for its size with 30 mm of armour at the front. Its small size, good maneuverability and high speed made it a harder target than slower tanks.

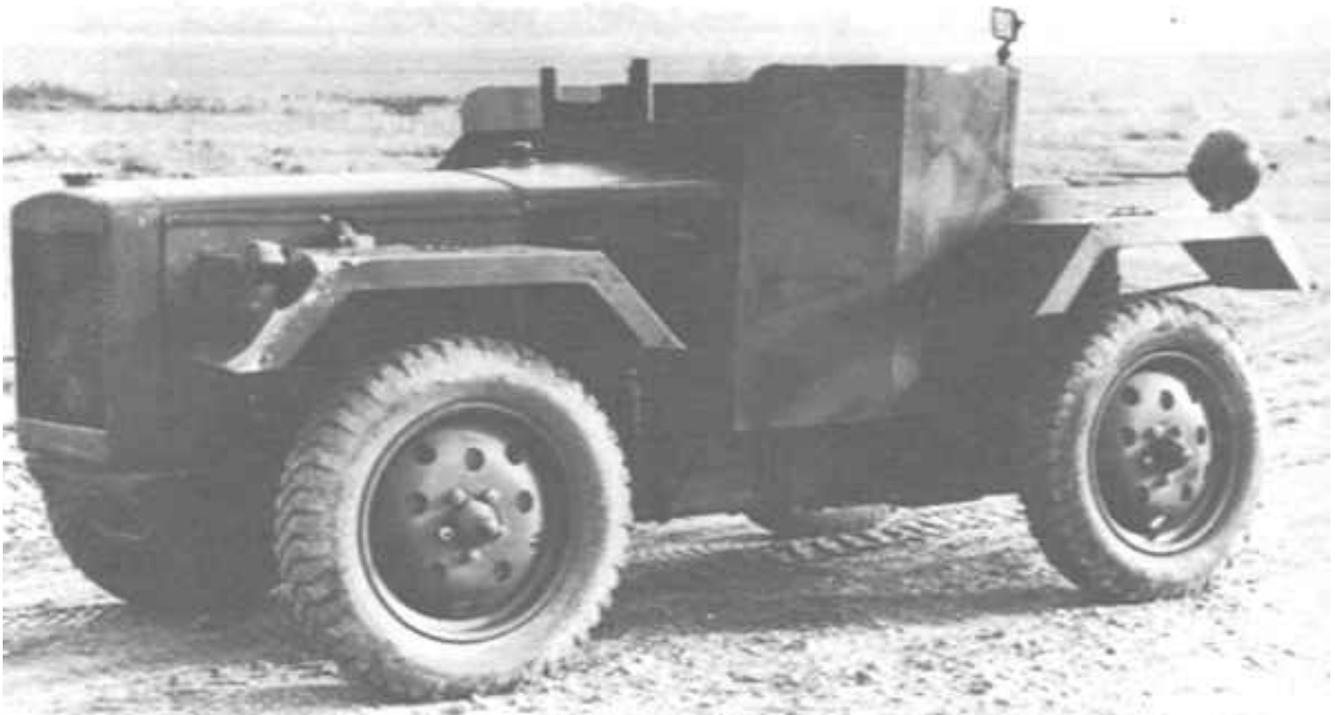
The engine was located at the rear of the vehicle and one of the ingenious features of Dingo was the transmission; a gearbox and liquid flywheel that gave five-speeds in both directions.

The original MK1 version had four-wheel steering; however this feature was dropped in Mk II because inexperienced drivers found the vehicle hard to control.

The Dingo featured a flat plate beneath the chassis to slide across uneven ground and a secondary thin floor pan to the crew compartment.

No spare wheel was carried, or really necessary because of the use of solid rubber tyres. (Although some were fitted with pneumatic tires designed to run flat for a limited distance) . Despite the hard tyres, the independent suspension gave a very comfortable ride.

A swiveling seat next to the driver allowed the other crewmember that was normally the 'commander' to attend to the No. 19 radio set or Bren general-purpose machine gun when required.



(Photo sourced from internet, known to also exist in the Bovington Library-)  
The competing BSA early prototype



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(Photo sourced from Internet, known to also exist in the Bovington Library & IWM KID1707)

The winning BSA-Daimler (late prototype) scout car

Photographer: Official photographer

Description: Mk1 with Road registration RME216 showing, experimental car rear view showing bolted or riveted hull plates. Toggle clips on the bonnet, conical wheel bearing covers and tyre valves. The chassis has many weight reduction and access holes. Folding metal roof rests on four support arms. Early large head lights and possibly semaphore indicators. All of which changed on the production model.



(Photo from Authors collection)

Photographer: Official photographer

Description: An Early Mk 1A? Note the escape hatch that is made from sheet steel, without the recessed panel and splinter proof edge fitting.



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Production went through 5 variants, which were mostly minor improvements. 6,630 vehicles were produced from 1939 to 1945.

- **Mk I** - original model with four-wheel steering and sliding steel roof.
- **Mk IA** - Rear bonnet attached with internal turning latches folding link operated roof, some w/radio and special stowage called Ia W/T
- **Mk IB** - airflow reversed w/inverted V-radiator grille, some w/radio. some w/Vickers K-guns, some w/front wheel steering only.
- **Mk II** - front-wheel steering and other minor changes, some w/radio as Mark I W/T, some w/mine rollers
- **Mk III** - waterproofed engine, steel roof replaced with canvas cover, external smoke grenade tubes added, fully radio interference suppressed ignition system added. Auxiliary generator for battery charging added engine water-sealed; after WW2 some cars modernised w/Vickers K-guns, smoke dischargers and other changes

Many MK II Dingo's were refurbished to **Mk III** specification by the MOD in the mid fifties  
It is thought that approximately 100 vehicles survive and remain in the hands of museums and other private enthusiasts.



(Photo sourced from Internet, known to also exist in the Bovington Library & IWM Reference MH3732 & )  
Daimler Mk I scout car **F9546** of the 2<sup>nd</sup> Armoured Division.

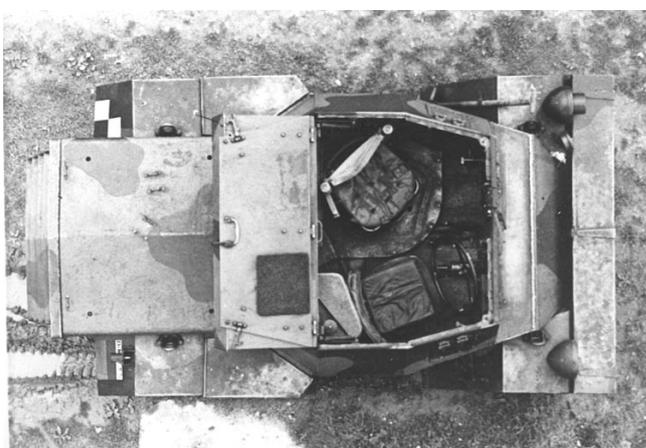
The 172<sup>nd</sup> car of the first production batch of Daimler Dingo Mk I. Chalked on the side are the letters D/BSA presumably identifying it as a Daimler manufactured by the BSA group



(Photo sourced from Olyslager Auto Library, Armour On Wheels To 1942, ISBN 0 7232 1848 X  
(Courtesy of Dave Page-)

Daimler Mk IA scout car **F9952** at the Aberdeen Proving Ground in the USA, clearly showing the rear wheel steering mechanism  
February 1942

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All photo's courtesy of the Imperial war museum References STT8193 to STT8204  
Photograph showing a Dingo in a painted camouflage Scheme, oven more so because it is not the common 'Mickey Mouse' pattern of Early WW2



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Photo courtesy of the Daimler.co.uk

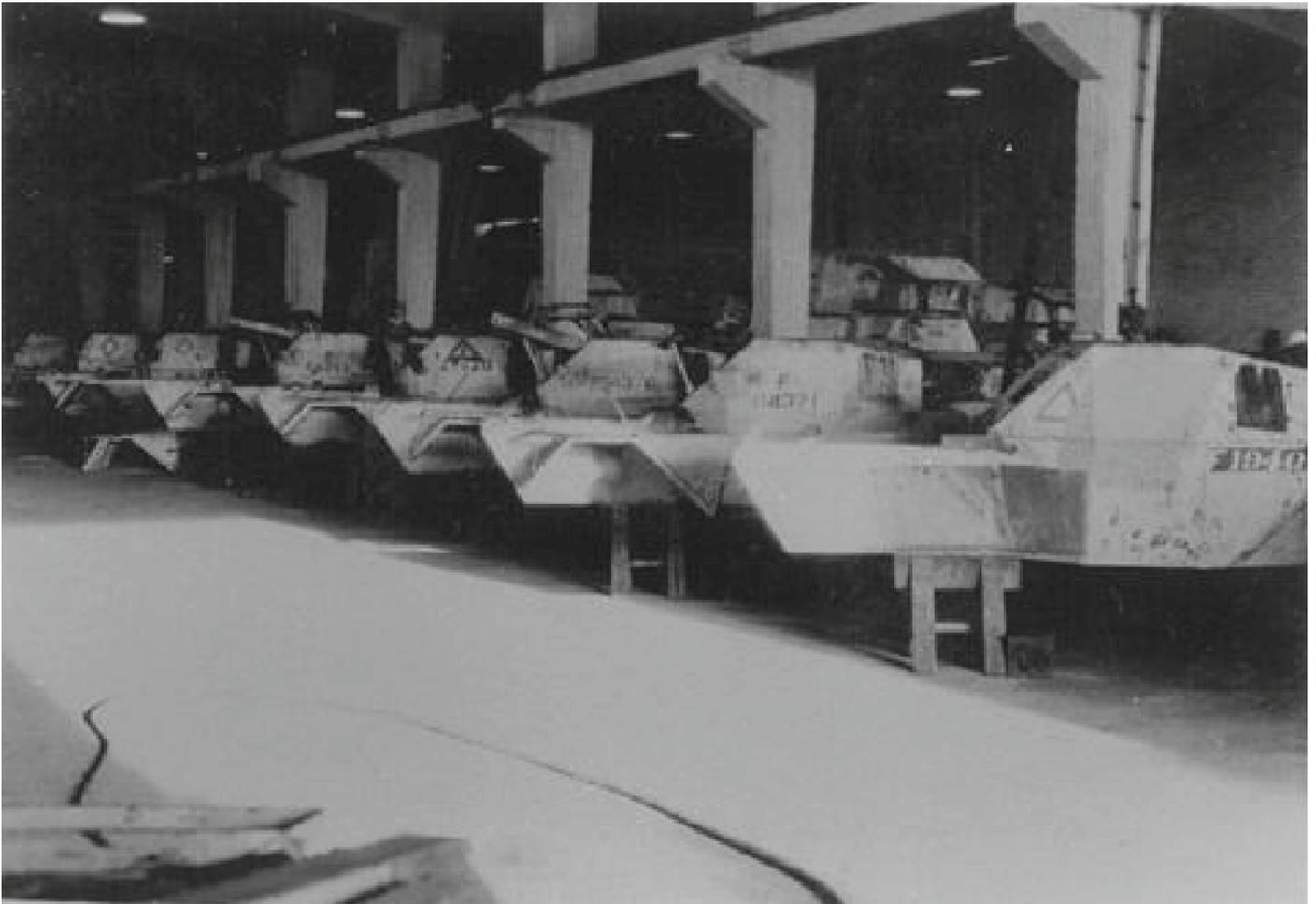
The Daimler Radford Works, Browns Lane, on the morning of 15<sup>th</sup> November 1940 after Mr Hitler's Luftwaffe had paid special attention to the manufacturing capabilities of the town of Coventry.  
(William Beardmore & Co Park head Glasgow provided the armoured plates.)



Photo courtesy of the Imperial war museum  
 PHOTOGRAPHER: Aufklärungsstaffel 3(F)/121  
 DESCRIPTION:

German Vertical aerial reconnaissance view of the centre of Coventry, Warwickshire, annotated with bombing targets. Photograph taken prior to 'Fall Mondscheinsonate' ("Operation Moonlight Sonata") the heavy Luftwaffe air raid on automotive and aircraft component factories on the night of 14/15 November 1941, which devastated the city centre.

Annotated targets identified on the attached interpretation sheet as follows: '20 6 supply depot Coventry Maintenance Unit C'; '51 2 transformer station'; '52 3 Hill Street gas-holder'; '73 8 Humber Hillman Co. Ltd. Motor Works automotive and aircraft engine factory'; '73 9 Cornercraft Ltd. Ace Works'; '73 11 Armstrong Siddeley Motors Ltd. aircraft engine factory'; '73 14 Alvis Ltd Holyhead Road, aircraft engines'; '73 21 Group of three factories for aircraft accessory parts, Singer Motors Ltd. West Works, Singer Motors Ltd. East Works, British Thomson-Houston Co. Ltd.'; **'74 12 Daimler Co. Ltd. aircraft and engine factory'**; '74 28 Bretston [sic] Stamping Co. Ltd. material for aircraft parts' [i.e. Brett's Stamping Co. Ltd.]; '1. Destroyed and damaged assembly shops as a result of bomb hits on Target 73 11', (hits also marked on 73 9); '2. bomb hits'; '3. barrage balloons'.  
 29 October 1940



(Photo sourced from Internet, known to also exist in the Bovington Library-)

A photo reputedly taken of the body shop & production line at the Bamfords in Uttoxeter, who were previously farm machinery manufacturers. They provided replacement faculties to those lost at Coventry. The works remained in production until 1945.

However the content of the photo is a bit of a mystery.....

The nearest car pictured, F19400 is a Mark 1B car and does not have a radio aerial mount.

Other cars have earlier manufacture numbers F14721 etc, but include radio mounts, also the cars are painted with company identification markings which would have presumably been applied by individual units presumably serving in north Africa, not in the factory.

It is therefore thought that these cars may be recovered vehicles that are being refurbished.

The building in the photo in question may possibly be the No2. Workshop at Tel-el-Kebir, Egypt and appears to be a Stonehenge Type 2 Workshop.

The construction consisted of reinforced concrete pillars and roof trusses, brick built sides and ends. The centre bay in the photo as it has runways for 2 ton overhead travelling cranes.

Royal Engineers would have carried out the construction at Tel-el-Kebir , which was a massive workshop area. Started in 1941, It grew to a size of 46 workshops having a total area of 1,250,000 square feet and scattered over an area of 10 square miles.

The workshop had a line system for overhauls of specific vehicles similar to the one pictured above.



Image courtesy of <http://isee.gateshead.gov.uk>

After the war armoured car manufacturing was moved to the Birtley Iron Works, Gateshead note the stacks of hull plates and folding roof panels in the foreground

(the photo was reputedly taken circ 1950)

However the content of the photo is again noted to be contradictory,

All cars being manufactured have the armoured steel lifting roofs that were discontinued in 1944 with car F340509, the brackets welded onto the hull above the escape hatch could be for the first aid box sometimes fitted at this location.



(Image courtesy Bovington Tank Museum)

One thousand workers from Daimler factories saw a demonstration of Armoured Fighting Vehicles, cars which they have themselves made.

This demonstration was arranged by the Daimler company at the request of their workers who have read the exploits of the famous scout car and MK1 armoured cars in North Africa, Sicily & Italy but who although contributing so largely at their benches to make this performance possible, have never had the opportunity to see their work in action

21 February 1944

Interestingly this period photo has an F-number of 2038?4 and this does not appear in the production contract records for Daimler Scout cars.



## Operational Difficulties Encountered with the Daimler Scout Car

### Armament

Lack of armament was noted by a number of formations using the car; the Hussars alleviated the problem by acquiring other armaments from various locations and adapting them to the vehicle.

Such modified weaponry included twin Bren guns, water cooled Vickers machine guns, or twin Lewis machine guns (sourced from the RAF).

Early cars were not equipped with storage compartments for hand grenades and it was found that these were very useful for fighting at close quarters when the main armament could not be swung around or easily depressed onto the target.

The 11th Hussars learnt the lesson and after March 43 all cars were supplied with a box of hand grenades. Latter purpose built grenade boxes were installed on the commander's side of the cockpit.

A Lake man anti aircraft mount was sometimes fitted to help protect against aircraft

**F9547 ,Mk1, circa 1939**



(Image courtesy Bovington Tank Museum)

A good photo of an Mk1 car

Showing the arrangement of the Lakeman anti aircraft Bren Gun Mount

Evidence given by a number of veterans serving during WW2 suggests that this arrangement to support the Bren gun was considered highly unsatisfactory, as it presented a number of problems in operation.

The first is that when the vehicle was on the move (quite likely if under attack) that the gun was liable to break free of the operators grip and highly likely to swing about causing injury.

The second is that the apparatus severely impaired the manoeuvring room of the driver and especially restricted access to the escape hatch.



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As the driver was sitting in front of the fuel tank it was considered essential that he had a quick and effective means of escape. Anything that impeded this was often discarded, as it would not always be possible to raise the steel roof in the case of emergency.

It has been stated that most crew found it favourable when strafed to simply shut the steel roof and sit it out in moderate safety.

One veteran suggested that it was simple folly or sheer stupidity to try and shoot down an ME109 fighter plane armed with twin 20mm cannon and 2 quick firing MG17 machine guns moving in excess of 250mph. Especially when armed with a relatively slow firing 30 round Bren and simultaneously removing the element of safe cover that the steel roof of the armoured vehicle provided.

It is noted in the 6<sup>th</sup> Hussars War diary that even when 12 armoured cars were simultaneously attacked that the Bren gun anti aircraft fire did not appear to affect the aircraft behaviour. This is not to say that occasionally some aircraft were not brought down, but when a large Breda anti aircraft cannon was around the aircraft certainly behaved with much more caution.

It was for this reason that latter vehicles were provided with the standard antiaircraft Bren gun tripod that was stored on the engine cover.

When parked the tripod could be dismantled and the gunner could position him-self away from the vehicle (the obvious strafing target) and use the Bren more effectively for the anti aircraft role.

Other units up gunned the vehicles using twin Bren guns, Vickers machine guns and the like to increase the rate of fire and to hopefully provide greater protection.

**F9547 ,MkI, circa 1939**



(Image courtesy Bovington Tank Museum)

Note the horizontal rail for the sliding steel roof and leather seat back to the driver's seat, as leather became more precious during the war this was changed to canvas.



### Instability

There is a common impression that the vehicle is unstable and likely to roll with dire consequences for the crew and in particular the commander, who could easily get seriously injured under the upturned body.

After inspection of War Diaries and personal accounts it is noted that there are some instances where the vehicles overturned, these in the main are however in cases where steep banks or rapid reversing maneuvers are involved.

It would be fair to say that most vehicle types would probably be at as much risk of overturning in these situations.

Only one ex-serviceman has so far admitted to rolling a Dingo to the author...

After some pressing he admitted that he had been going at about 90mph (probably more like 65) and had failed to negotiate a bend through a railway bridge.

He clipped the abutment with the left wing and it was this impact that initiated the movement that eventually toppled the car.

Fortunately the commander was thrown clear and the driver managed to keep hold of the wheel and inside the upturned body of the vehicle and both crew walked away with our serious injury.

### The Sliding Steel Roof

On the Mark 1 car an armoured steel roof was fitted behind the crew that could be slid forward on rails to give protection from above.

However it is reported the sliding steel roof could come unexpectedly forward in the event of an accident and rapid deceleration. As the roof weighs about 200lbs there was a very real risk of the vehicle occupants being decapitate or at least severely injured. **ADD REFERENCE FROM TRACKS ACROSS EUROPE**

This was the reason for the urgent need for the redesign and revised raising cantilever system with locking mechanism fitted on latter vehicle variants.