

RB 44 the lowdown

Dodge 50 Series

The **Dodge 50 Series**, later known as the **Renault 50 Series** were light commercial vehicles produced in the [UK](#) by [Dodge](#) and later [Renault Véhicules Industriels](#) between 1979 and 1993. The 50 series included a wide range of chassis and body configurations, including two distinctly different cab designs, and spanned the 3,500–7,500 kg (7,700–16,500 lb) revenue weight range. Various engines were offered, including the [Perkins](#) Phaser and [4.236](#),^[1] and there was also a [four-wheel-drive](#) version, the RB44, built by Reybolds Boughton (now known as [Boughton Engineering](#)).

Bodybuilding companies converted many into various configurations from tipper trucks to buses. Many were built as "chassis cabs" to have [box bodies](#) fitted; these were widely used by utility companies in the UK. They often came fitted with compressors and generators. Gradually this kind of vehicle fell out of favour, partly due to reliability issues relating to combining plant equipment with the vehicle drivetrain. The vehicle is otherwise toughly built. The utility companies today favour smaller vans with towed generators. The four-wheel-drive version saw some use with the [British army](#) since it was one of very few British-built trucks of the class, and it could carry considerably more stores and equipment than even the largest [Land Rover](#) models.

Chrysler received financial assistance from the [British Government](#) which was desperate to support the ailing [British motor industry](#). However, having inherited various struggling car and commercial vehicle marques (and factories) from the [Rootes Group](#), notably the commercial marques [Commer](#) and [Karrier](#), in addition to various French concerns, Chrysler Europe struggled to return a profit. In 1978, Chrysler pulled out of their European operations altogether, selling them to [Peugeot](#). The cars and small vans became known as [Talbots](#).

However, Peugeot had little interest in commercial vehicles and the factory for the heavier models was run in partnership with Renault Véhicules Industriels, who sought a UK production site for engines for their existing Renault-branded models. They continued to manufacture the 50 Series, along with the small Dodge (formerly [Commer](#)) Spacevan, and the large [Dodge 100 / Commando 2 Series](#) of 7,500–23,000 kg (16,500–50,700 lb) trucks. The transition to Renault branding was slightly muddled by some vehicles bearing both a Dodge name and a Renault-diamond badge.

By 1987, the 50 Series had been updated and was badged as the Renault 50 Series or Desoto 50 Series in Bermuda; the UK incarnation of the Dodge marque ceased to be used for new vehicles. (Chrysler maintained an entirely separate [Dodge](#) brand in the U.S., and in 2006 began re-introducing Dodge car models from the USA into the UK market.) Renault continued to manufacture the 50 Series until 1993, but it was never a great sales success, even being forced to compete with other Renault products, in the form of the [Master](#) van, which Renault favoured in its export markets.

In 1994, Renault — keen to clear the factory for large-scale engine production — sold the production tooling to a Chinese manufacturer. The 50 series is still being produced in China under a different name.

https://en.wikipedia.org/wiki/Dodge_50_Series

Land Rover Llama

The **Land Rover Llama** is a vehicle that was designed and developed by the British company [Land Rover](#) in the mid-1980s. 11 [prototypes](#) and a single production vehicle were built during 1986/7 with the hope of winning a contract from the [Ministry of Defence \(MoD\)](#) to replace its existing fleet of [Land Rover 101](#) gun tractors. Heavily based on the contemporary [Land Rover One Ten](#), the Llama was intended to be sold on both the military and civilian markets. However, the MoD did not choose Land Rover's design and without the security of these sales Land Rover was unwilling to risk putting the Llama on the market.

The name 'Llama' was only the codename given to the development project- the vehicle was actually called the Land Rover 110 Forward Control in official Land Rover documentation. However, the design is now known to enthusiasts of the Land Rover marque as 'the Llama'.

Land Rover as a company went through a period of restructuring in the 1980s. This involved improving the company's products, leading to the launch of the [Ninety/One Ten/127](#) range in 1983/4 as well as updates to the [Range Rover](#). When [Rover](#) car production left the [Solihull factory](#), Land Rover was able to close its numerous satellite factories in [Birmingham](#) and bring engine, gearbox and other component manufacture under one roof. As part of these changes, Land Rover wanted to reduce the amount of specialist conversion work that it sent 'out of house' to other companies. This led to the creation of the Special Vehicles Division and to the start of the Llama project.

In order to open up the more heavy-duty end of the [off-road vehicle](#) market (as occupied by vehicles such as the [Mercedes-Benz Unimog](#)), it was decided to develop a version of the existing Land Rover capable of carrying larger and heavier loads. Such a vehicle would also be capable of being the basis of numerous bodystyles and equipment options.

The project was spurred on by a decision from the [Ministry of Defence](#) to replace its fleet of [Land Rover 101 Forward Controls](#), which were gun tractors specially built by Land Rover in the 1970s. Over 1700 101s had been sold to the MoD, plus small numbers to other military buyers. At a time when Land Rover sales were falling worldwide, winning such an order would provide a much-needed boost to the company.

Land Rover had produced 'Forward Control' (i.e.- vehicles where the driving controls were positioned over or just ahead of the front [axle](#)) of its [Series II](#) models in the 1960s, based on the standard long-wheelbase chassis. It made sense to use a similar design for the new version.

Project Llama began in 1985. The [chassis](#) was based on that of the [One Ten](#), and that vehicle's basic layout was adopted. The chassis was made of thicker [steel](#) than normal Land Rover chassis. Land Rover claimed that 85% of the chassis and drivetrain components of the Llama were taken from existing Land Rover models. A 3.5-litre (215 c.u.) [Rover V8](#) with [Zenith/Stromberg carburettors](#) was used, tuned to deliver 110 [horsepower](#) (less than the power developed by the same engine in other Land Rover products). The 5-speed LT85 [manual transmission](#) from the V8-powered One Ten was used, with the LT230 two-speed, permanent [4 wheel drive](#) transfer box.

The [coil spring](#) suspension used existing components, but with unique twin rear springs to give a 1.75-[ton](#) payload. Using standard One Ten axles ([Dana](#)-designed units built by [Salisbury Engineering](#)) led to stability problems, so bespoke units were used, being 12-inches (30 cm) wider than the standard ones.

Land Rover developed a [fibreglass](#) cab body on a steel-tube '[spaceframe](#)'. This was hinged at the front and tilted forwards to allow access to the engine and gearbox (engine access had been an issue with the older Forward Control models). The cab was fully trimmed in plastic and rubber panels, using the instrument pod from the existing Land Rover models, and other controls and components from other [Rover Group](#) cars such as the [Austin Metro](#) and the [Austin Montego](#). This well-equipped interior reflected Land Rover's intentions that the Llama should eventually be sold on the civilian market.

The prototypes were fitted with both 'General Service' [canvas](#)-covered rear bodies or with a steel/fibreglass box body. Some Llamas were fitted with a mechanical winch driven from the gearbox, which could be fed through the front or rear chassis cross-members for vehicle recovery.

One Llama vehicle was built on the [Solihull](#) production line to test the suitability of the vehicle to mass production and to see if the Llama could be built on the Land Rover One Ten production line.

The Llama prototypes were sent to the MoD for testing. These were fitted with a variety of rear bodies to demonstrate the versatility of the design. These included the standard open drop-side rear tray, the 'General Service' version with a removable [canvas](#) hood, a demountable glass-fibre 'pod' that could be loaded and unloaded from the chassis by a hydraulic hook, a solid enclosed rear body (mocked-up as both an Ambulance and a radio communications vehicle) and one example was fitted with a mock-up missile launcher. Vehicles were subjected to load-carrying, off-road driving, stability, cold-weather and endurance/performance tests. These showed several flaws with the design. The main one was that the coil-spring suspension and high [centre of gravity](#) led to poor stability over rough ground when fully laden. The performance of the 2.5-ton vehicle was poor, especially when loaded. The petrol engine fitted to the Llama was also a problem, as the MOD had recently standardised on [diesel](#) power for all its vehicles. The V8 was Land Rover's most powerful engine available, and bringing in a more powerful diesel from another builder would remove the Llama's key selling feature- its parts commonality with the standard Land Rovers (of which the MoD had a fleet of nearly 20,000).

Land Rover built one prototype Llama powered by its 85-[horsepower Diesel Turbo](#) engine. However, this had unacceptably low performance.

The MoD finally selected a 4-wheel drive version of the [Dodge 50](#) truck, converted by Reynolds-Boughton Engineering and designated the RB44. After only a few years in service the entire fleet had to be overhauled and fitted with a crucial brake modification at major costs to the UK taxpayer. The poor reliability of the RB44 meant that the [British Army](#) opted to overhaul its fleet of [Land Rover 101s](#), which remained in service until the early years of the 21st century.

Without the guaranteed orders from the MoD, Land Rover did not want to risk launching the Llama on the civilian market, in direct competition to the successful [Unimog](#), especially given the Llama's lack of a suitable engine. The project was cancelled in early 1988.

Very little new technology was developed for the Llama project, and so there was no real effect on the existing range. However, the [Ninety/One Ten](#) range, and their successors, carried a reminder of the Llama project for many years.

The cluster of warning lights on the dashboard of the Land Rover was modified in anticipation of the launch of the Llama to include a new light. This carried the symbol of a tilting lorry cab with a large [exclamation mark](#). Its purpose would have been to warn the driver of a Llama if the

locking mechanism for the tilting cab was unlocked. This new cluster was fitted to all Land Rovers from mid-1987 (with the cab-lock warning light not wired in, obviously). This design of warning light cluster remained in use on Land Rover Defenders until 1998, 10 years after the Llama project was cancelled.



https://en.wikipedia.org/wiki/Land_Rover_Llama

Ford Transit

The **Ford Transit** is a range of [light commercial vehicle](#) produced by [Ford](#) since 1965. Sold primarily as a [cargo van](#), the Transit is also built as a passenger van (marketed as the Tourneo since 1995), [minibus](#), [cutaway van chassis](#), and as a [pickup truck](#). Over eight million Transit have been sold, making it the third best-selling van of all time^[1] and have been produced across five basic platform generations (debuting in 1965, 1978, 1986, 2000, and 2013 respectively).

The first product of the merged [Ford of Europe](#), the Transit was marketed through Western Europe and Australia; by the end of the 20th century, it was marketed nearly globally with the exception of North America until 2013; it replaced the [Ford E-Series](#) in 2015. The Transit has been the best-selling light commercial vehicle in Europe for 40 years, and in some countries the term "Transit" has passed into common usage as a generic term applying to any light commercial van in the Transit's size bracket.^[2] While initially designed for European consumption, the Transit is now produced in Asia, North America, and Europe for worldwide buyers.

The first generation Transit, or the **Transit Mark I** in the United Kingdom,^[3] was introduced in October 1965, taking over directly from the Thames 400E, and has been in continuous production in three basic generations to the present day.

The van was produced initially at Ford's [Langley](#) facility in Berkshire, England (a former Second World War aircraft factory which had produced [Hawker Hurricane](#) fighters), but demand outstripped the capability of the plant, and production was moved to [Southampton](#) until closure in 2013 in favour of the Turkish factory.^[6]

Transits have also been produced in Ford's [Genk](#) factory in Belgium and also Turkey. Transits were produced in Amsterdam for the local market from the mid-1970s until the end of 1981. This factory had ample capacity, since the [Ford Transcontinental](#) produced there had little success (total production 8000 in 6 years). Although the Transit sold well in the Netherlands, it was not enough to save the factory, which closed in December 1981.

The Transit was introduced to replace the [Ford Thames 400E](#), a small mid-engined [forward control](#) van noted for its narrow track which was in competition with similar-looking but larger vehicles from the [BMC J4](#) and [J2](#) vans and [Rootes Group's Commer](#) PB ranges. In a UK market segment then dominated by the [Bedford CA](#), Ford's Thames competitor, because of its restricted load area, failed to attract fleet users in sufficient numbers. Ford switched to a front-engined configuration, as did the 1950s by Bedford with their well-regarded CA series vans. [Henry Ford II](#)'s revolutionary step was to combine the engineering efforts of [Ford of Britain](#) and Ford of Germany to create a prototype for the Ford of Europe of today—previously the two subsidiaries had avoided competing in one another's domestic markets but had been direct competitors in other European markets.

The Transit was a departure from the European commercial vehicles of the day with its American-inspired styling—its broad track gave it a huge advantage in carrying capacity over comparable vehicles of the day. Most of the Transit's mechanical components were adapted from Ford's car range of the time. Another key to the Transit's success was the sheer number of different body styles: panel vans in long and short wheelbase forms, pick-up truck, minibuses, crew-cabs to name but a few.

In March 1978, a facelifted version, commonly known in some markets as the **Transit Mark II**,^[5] debuted with a restyled nose section, lifted from the US third generation Econoline, new interior, and the introduction of the [Pinto](#) engine from the [Cortina](#) in place of the Essex V4.

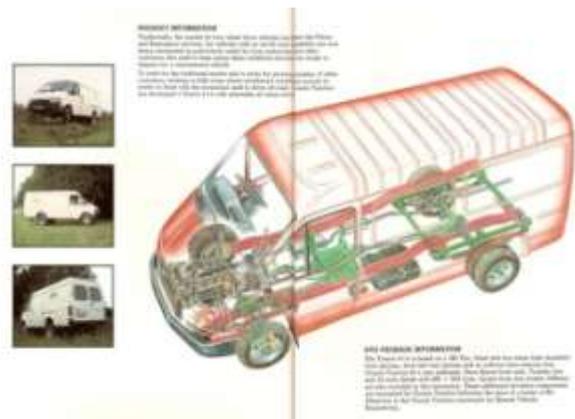
Many fleet owners experienced premature camshaft wear in early Pinto units in the Cortina and for two years the Transit 75 was available with the 1.6 L Ford Kent cross-flow engine. High-performance versions intended for police or ambulance use used the 3.0 L [V6](#) version of the [Essex engine](#), Australian variants had 4.1 L (250 cu in) [inline 6-cylinder](#) engines.

In 1984, the York diesel engine was redesigned into the 2.5 L "DI" (direct injection) unit. At this time this generation received a minor facelift including a grey plastic front grille with integrated headlamp surrounds, wraparound indicators, longer bumper end caps and multifunction rear lights incorporating fog, indicator, reversing and side lights for the panel van. This facelift did not commonly result in a new "Mark" number.

The Mark II was available in 6 body styles: Van, Kombi, Chassis Cab, Parcel Van, Bus and Crewbus all available in short-wheelbase (2690 mm) and long-wheelbase (3000 mm) versions. A selection of 5 engines was available: 1.6-litre OHC Petrol, 1.6-litre OHV Petrol (Kent), 2.0-litre OHC Petrol, 2.0-litre OHC Petrol (Economy) and 2.5-litre Diesel. On top of this were 32 door combinations, 6 axle ratios and options for 12 – 17 interior seats. All of these were available in any combination when purchased with Ford's highly customizable custom plan. At the time this gave the business sector an unprecedented amount of flexibility, which was a major factor in the vehicles' ultimate success.^[13]

In 1981, for mainland European market only, the Transit Clubmobil was introduced by the Hymer company. This was fitted with a 1.6 / 2.0 OHC engine, and featured a custom interior – captain style swivel seats in velour, pile carpet, motorsport steering wheel, unique Ronal 14" alloy wheels, unique side windows, folding back seat, luggage box, unique front spoiler, tinted glass, power assisted steering, spare wheel carrier and rear door ladder. In 3 years of production 150 were produced and less than 20 are thought to still exist.

In late 1982 a four-wheel drive version was added to the German market. This was developed together with a Ford dealer in [Stuttgart](#).^[14] **The 4x4 Transit** was later offered in other markets as well.



https://en.wikipedia.org/wiki/Ford_Transit

<http://passionford.com/forum/general-car-related-discussion/312224-transit-4x4.html>

The RB44 Heavy Duty Utility Truck

1. In June 1988, the Department placed a contract worth some £ 25 million with Reynolds Boughton for **846 Heavy Duty Utility Trucks** - known as the RB44 -to meet a requirement to replace the ageing 1 tonne Land Rover fleet. The RB44 was selected following evaluation trials of one vehicle type from each of three contractors. Although the RB44 used in those trials met the stated requirement and complied with road traffic legislation, the user mandated changes to the production vehicles' design to refine its braking efficiency.

2. The Reynolds Boughton contract provided for the first ten vehicles produced to be validated against the Statement of Requirement in a series of trials following which the Department would consider whether to exercise an option to buy the remaining vehicles. These main production vehicles were to be manufactured to the agreed build standard as set and proved through the series of trials. Reynolds Boughton's quality assurance procedures and their production testing were to ensure this, as stipulated in the contract. The validation trials began in September 1989 and raised concerns about the braking efficiency.

3. Incorporating the mandated changes, a manual transmission to improve off-road handling and further modifications to enhance the braking system, cost the Department some £ 940,000. Following the successful completion of the validation trials, the design of the vehicle was formally accepted in May 1990 and the production option exercised. However, in April 1991, following delivery of the production vehicles to Units, braking faults began to appear. The Department therefore carried out brake tests on 18 RB44s to determine the cause. Half of these vehicles were assessed as having unsatisfactory performance. Reynolds Boughton argued that the problems were caused by the brakes "bedding-in". Given the low utilisation of the fleet, that "bedding-in" is a recognised phenomenon, and the successful demonstration of the vehicle prior to acceptance, this argument was accepted. But the Department continued to monitor the position. After Units continued to express concern with the braking performance, the Department conducted additional investigations, after which deliveries of RB44 were suspended in September 1992.

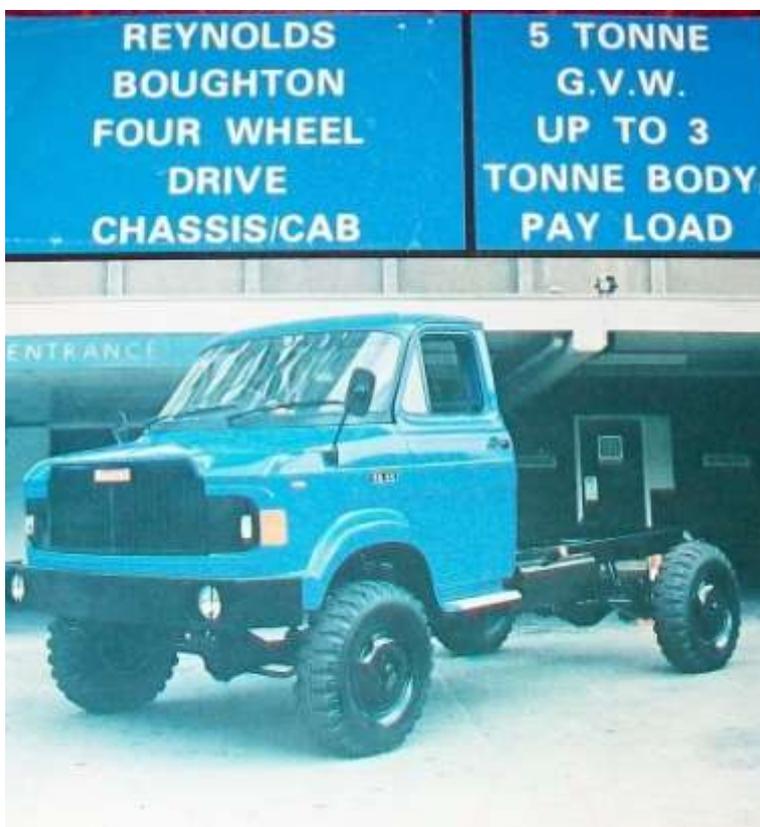
Deliveries only recommenced when Reynolds Boughton demonstrated a modification which appeared to resolve the problem and which was incorporated on all of the RB44s already delivered at no cost to the Department.

4. By August 1993, the braking problems had recurred with the Royal Electrical and Mechanical Engineers reporting that 37 out of 57 in-Service vehicles investigated had a tendency to deviate to the left when braking at 35 mph. Vehicles being used on United Nations peacekeeping duties in Bosnia

were reported to be experiencing similar problems and were withdrawn from service. Finally, in December 1993, the Quartermaster General declared all RB44's "vehicle-off-the-road". Investigations by the Department discovered that maintenance on the vehicles in storage had been suspended and that some Units were applying incorrect maintenance procedures.

5. Responsibility for rectifying the performance shortcomings was the subject of negotiation between the Department and Reynolds Boughton. The company argued that the Department should pay for any modifications required because the vehicle had successfully completed its trials and been accepted into service. The Department continued to argue that liability rested with Reynolds Boughton given that the inherent problem lay in the original design.

6. In the event, both parties contributed to the necessary work. Reynolds Boughton estimate that they spent about £ 250,000 between January 1994 and September 1995, whilst the Department estimate that in total they have spent some £ 1.5 million to resolve the braking problems and to make the vehicle fit for service use. These changes included modifications to the build standard to reduce both suspension-related steering characteristics and sensitivity to any shortcomings in the maintenance regime. (These figures ignore the £ 1.7 million additional storage costs incurred and the operational implications of having to run on the existing 1 tonne vehicles.)



<http://www.dodge50.co.uk/rb44-story-1.html>

Weird 4x4 tractors and all-wheel-drive Thames Traders. Only on Biglorryblog!



'Two-Stroke' writes me to say: "Following on from the Biglorryblog post on the Cargo-cabbed Ashok Leyland 6x6 in Africa. There was some interesting 4x4 solutions displayed on Ford Chassis at the recent Hospice of St Francis steam rally."

"In the forestry section next to the Latil (that Ron featured) was a 4x4 Thames Trader. Is it safe to assume this was County conversion? As Ford was not a big player in 4x4, compared to Bedford who had the military business." Well interesting questions TS. It could well have been, as you suggest, a County conversion. But equally active in the all-wheel drive conversion market was Newton Abbott Motor (NAM), United Services Garage (USG) the big Bedford dealer in Portsmouth and Reynolds Boughton to name but a few... Now click through here for more weird all-wheel-drive wonders!

<http://www.commercialmotor.com/big-lorry-blog/weird-4x4-tractors-and-all-whe>