# **NEWSLETTER**

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## Reminders & Upcoming Events

#### Sunday, 13 April 2025

Car display at round 2 of the Karting NSW State Series Frogs Hollow Karting Track

The Ulysses riders have invited us to participate in a display at the NSW Karting Race Round 2 event. This will have plenty of action and adrenaline, combined with good food and coffee from onsite vans.

It will also be a great opportunity to connect with plenty of car-oriented enthusiasts.

Meet at 9 am at the Bega Cheese Heritage Centre for coffee and catch up with Ulysses riders - then head to the track at 10:00 and set up the display. We get free entry.

The track is the Frogs Hollow Karting track We have set up an RSVP for this event - would be good to know who's planning to go!

#### Friday, 25 April 2025

Anzac Day club participation in local ceremonies

# Help needed.

- Do we have any members Fire Extinguisher Certification?
- Member's involvement cleaning duties
  Need volunteers for April please. Our alternative is to employ outside help at cost to the club.
- Helpers for club visits & tours we need some fresh helpers just to assist please? Craig Ruting has notes on our vehicles if you wish to learn & speak about vehicles.
- Coordinator for Club displays in sheds & club rooms of tools & other items.

Thanks to Bob Coady for doing the Test and Tagging of the electrical outlets in and around the Club, much appreciated.

## Member Name Tags

Contact the Secretary to add your name to the list. We don't wish to get them made if you are not going to wear them. Send an email to <a href="mailto:info@schvc.com.au">info@schvc.com.au</a> or SMS the Secretary on 0474138709

## Arrive safely with your vehicle in tow.



Transport NSW is committed to raising awareness of towing best practices among car club members who tow vehicles to car shows. Our goal is to reduce risk and enhance road safety as part of a broader commitment to safer NSW roads.

Towing a vehicle on a trailer adds significant weight to your vehicle, requires careful planning and loading, and puts additional responsibilities on a driver to manage safety.

When planning your trip:

- Ensure that your tow vehicle and trailer comply with all relevant standards for registration and are roadworthy.
- Check that your vehicle, towbars, and safety chains comply with the rules and standards for towing vehicles.
- Allow for more rest stops and shorter travelling days as towing is more stressful and tiring than normal driving.

Vehicles must be suited to the trailer and meet dimension and mass limits for vehicle combinations. Vehicle manufacturers usually indicate in the owner's manual the maximum weight and other features of trailers appropriate for the vehicle. These limits should not be exceeded.

You can attend your nearest public weighbridge and look out for free information days on how to load for even weight distribution and safe driving tips for towing.

If you are transporting your vehicle interstate, remember to check individual State or Territory regulations before you leave.

Visit NSW.gov.au / Towing a trailer or caravan for safety advice.

# The Morgan Story

A young HFS Morgan reportedly had a motorcycle accident and sketched out a single-seat cyclecar so he could be mobile once more. The Morgan prototype three-wheeler was built with the aid of his friend's father, William Stephenson-Peach, who was the engineering master at Malvern College.



Morgan Runabout – Andrew Bone

The little Morgan was different from other cyclecars, having 'sliding-pillar' independent coilspring front suspension. (The suspension is more properly a 'sliding-hub-on-pillar' design, not a sliding-pillar.) It had a backbone chassis with no bodywork and power came from a transversely mounted, 7hp Peugeot twin-cylinder motorcycle engine.



The driveshaft ran through the backbone tube to a two-speed transmission, with no reverse and chain drive to the rear wheel. The steering was by tiller, and it had external band brakes.

With family financial backing, three singleseater cars were exhibited at the 1910 Motor Show at Olympia in London. There was great interest, but it was obvious that a two-seater was needed.



1912 Morgan Runabout Deluxe

The production two-seater was built in 1911, featuring a bonnet, windscreen, wheel steering and crank starting. It was a big hit at the 1911 Motorcycle Show and Harrod's department store in London took on the sales agency for it. The Stg£65 Morgan was the only 'car' ever to appear in a shop window at Harrods.

The Morgan Motor Company was registered as a limited private company in 1912, with HFS Morgan as managing director and his father, who had invested in his son's business, as its first chairperson.

Production Morgans used air-cooled or liquid-cooled motorcycle engines. Engine mounts were cast lugs brazed into steel chassis tubes and the engine was positioned ahead of the axis of the front wheels, with the radiator behind it. Like motorcycles, Morgans had hand throttles, Bowdenwire control mechanisms and drip lubrication.

In 1913, after a narrow loss in *The Light Car & Cyclecar* trophy challenge at Brooklands, Morgan driver W G McMinnies won the Cyclecar Grand Prix at Amiens in France, at an average speed of 42mph (68 km/h) for the 262km distance.

This victory inspired the Morgan 'Grand Prix' model that was produced until 1926, and from which evolved the 'Aero' and 'Sports' models.

Racing success led to demand the company struggled to meet and that's why there is such a variety of engines fitted to Morgans. V-twins came from Anzani, JAP, Blackburne, British Vulpine, Blumfield, Precision and, later, Matchless. Morgans were also licence-built in France by Darmont.

After World War I, the company introduced the easily changed rear wheel that customers had been requesting for several years.



Morgan three-wheeler cutaway

Morgan became by far the most popular cyclecar and that was enhanced by introduction of the Family model, with kids' seats behind the front bench. Morgan three-wheelers benefitted from an annual tax of just Stg£4, half the tax on the Austin 7, provided they remained under eight hundredweight (cwt) – 400kg.

The company's racing Morgans were headed by Harold Beart's 1096 cc Blackburne-engined special that covered nearly 92 miles in a one-hour trial at Brooklands, with a peak speed of over 100mph (160 km/h).

However, Morgan's racing efforts suffered a blow in 1924, when E B Ware's JAP-engined car rolled at Brooklands, seriously injuring him and saw a ban on three-wheelers competing as cars.



1936 Morgan F4

Cyclecar racing success continued, with Morgan earning eleven gold medals and three silvers from fourteen entrants at MCC's 1927 London-Edinburgh Trials alone. Morgan won the 1929 Cyclecar Grand Prix at Brooklands, where a 750cc Morgan-JAP averaged 64.7mph (104.1 km/h). In 1930, Gwenda Stewart achieved 113mph (182 km/h) in a racetuned Super Sports.

However, competition from cheaper, small cars, such as the Stg£149 Austin Chummy, forced

Morgan to cut prices progressively through the late 1920s and early 1930s. Even with standard electric lighting and horn, double-thickness windscreen, front-wheel brakes and electric start, the Morgan Standard's price fell to Stg£85 in late 1927. In 1933, the Family was priced at only Stg£80.



1935 Morgan Super Sports

Performance models justified higher prices and the Super Sports, with an overhead valve JAP 10/40 water-cooled V-twin, was priced at Stg£155. The 10/40 engine was also available in the Aero, at Stg£132, while a more sedate air-cooled JAP-powered Aero went for £119.

By 1930, the Stg£100 Ford Popular was proving vastly more popular with family buyers than Morgan's three-wheelers, but the company tried to counter by offering the Ford 8, 933cc and 10hp 1.2-litre four-cylinder engines in its four-seat cyclecars. These models remained in production until 1952.



1935 Morgan Super Sports

Morgan's last V-twins were powered by 990cc Matchless engines and were delivered to Australia after the War.

'Last' is not quite true, because the Morgan V-twin three-wheeler was reintroduced in the USA in 2012, with 115hp S&S engine and five-speed Mazda transmission.



2012 US-spec Morgan 3-Wheeler

Shattering performance of 115mph (185km/h) top speed and a 0-100km/h time of 4.5 seconds guaranteed plenty of interest. (Morgan couldn't meet the USA's rear-collision safety laws with its car range – hence the rebirth of the three-wheeler that's considered a motorcycle in North America.)

However, in early 2022, a brand-new three-wheeler Morgan Super 3 was launched, in RHD and LHD configurations, powered by a turbocharged, Ford 1.5-litre, three-cylinder engine, nestled in a brand new monocoque body/chassis:

The new three-wheeler was made available again in the USA, in mid-2023.

#### Four wheelers

Morgan tackled the Ford and Austin competition in late-1935 by introducing its first four-wheeler. It was called the 4/4 – four wheels and four cylinders – being powered by a 34hp Coventry Climax 1.1-litre engine.



1936 Morgan 4/4

The three-wheeler's backbone chassis was replaced by a conventional pressed-steel frame, but the sliding-pillar front suspension was retained.

It was a two-seater, with distinctive twin spare wheels and sold for Stg£194.

A four-seat model was added in 1937 and a Stg£236 drophead coupe in 1938. When Coventry Climax stopped engine supply, Morgan switched to a tuned 1.3-litre Standard Motor Company Ten that produced 39hp.

In 1938, a 4/4 was entered at Le Mans and Stg£250 factory replicas had fold-down windscreens, cycle fenders, sub-one-litre engines, and single spare wheels.

Production of the 4/4 was halted during World War II but resumed afterwards, until the Standard engine was phased out in 1950. The 4/4 kicked off again in 1955 when 1.2-litre Ford 100E became available.



Morgan +4

The Morgan +4 was introduced in 1950 as a 'plus' version of the 4/4. The +4 initially used the 2.1-litre Standard Vanguard engine and then the Triumph TR2 engine in 1953, TR3 in 1956) and TR4A engine until 1969. That was the base for the limited-production Competition version.



1962 Morgan +4 engine

The +4+, was made from 1964 to 1967 with a fibreglass coupé body. The light weight and reduced drag improved performance, but Morgan traditionalists didn't buy the plastic body and non-Morgan enthusiasts hated the stiff suspension. Fifty +4+ cars were planned, but only 26 were built.



Morgan +4+ FRP Coupe

Plus 4 production was suspended in 1969 but resumed in 1985 with a Fiat twin-cam engine (1985–1988) and then a four-cylinder Rover engine (1988–2000). After a four-year absence, the Plus 4 was released in 2004 with a 155hp Ford four-cylinder engine. A limited edition Plus 4 was reintroduced in 2014 as the Plus 4 Super Sports.



Morgan +4 Drophead

Morgan maintained its performance edge by fitting the ubiquitous aluminium-head-and-block Rover V8 engine (originally a Buick-Oldsmobile-Pontiac engine) in the new +8 model, in 1968. Bore and stroke variations available for this engine saw displacements increase from the original 3.5 litres to 3.9 litres, then four litres and, finally, 4.6 litres all with no weight penalty over the Triumph iron four. Power ranged from 143hp up to 190hp.

Although retaining traditional Morgan chassis, suspension and styling the V8-powered model adopted aluminium wheels.



Morgan Aero 8

The greatest leap Morgan has ever made caught everyone by surprise in 2000, with the release of the Morgan Aero. Gone was the ladder frame and sliding-pillar front end, replaced by an aluminium monocoque chassis.

Wood was retained, as a means of fastening the body panels to the monocoque, but racing-oriented 6

features including inboard shock absorbers, double wishbone suspension all around, centre lock magnesium wheels and rose-jointed suspension provided significant handling improvements over previous models.

Taking full advantage of that running gear was a 4.4litre BMW V8 engine (M62TUB44) producing 286hp (210kW) at 5500rpm and 430Nm at 3750 rpm. Performance was 0 to 100km/h in 4.8 seconds with a top speed of 260km/h.

Also, part of the updated package were cruise control, air-conditioning, and a heated windscreen, but no driver-nursing traction aids other than a rear LSD.



Morgan Aero Max

The coupe Aeromax version arrived in 2008 and the Aero-chassis-based +8 in 2011.

The +8 was replaced by the Roadster in 2004. Traditional chassis and suspension were as used in the +8, but power came from the 223hp Ford UK Mondeo V6. That engine was coupled to a Getrag gearbox. In 2011–12, the engine was replaced by the 3.7 Duratec Cyclone engine and output increased to 280hp.



Morgan CX-Generation aluminium chassis

A second iteration of the radical aluminium monocoque chassis was released in 2019 in the Morgan Plus Six that retained the traditional open sports car Morgan 'look'. The new 'CX-Generation' chassis was lighter, with an all-up weight of only 97kg and had around double the torsional stiffness of the Aero chassis.



Morgan Plus Six

The Plus Six was powered by a BMW B58, turbocharged, in-line six-cylinder petrol engine, producing 335hp, coupled to an eight-speed ZF automatic transmission.

Using the same new-generation chassis the Morgan Plus Four was revealed online in March 2020. Like the Plus Six, it had a bonded aluminium chassis and all-independent suspension design. The Plus Four was powered by a BMW B48, turbocharged, inline four-cylinder petrol engine producing 255hp, with either a six-speed manual transmission or an eight-speed automatic transmission.



The latest iteration of the CXV-Generation aluminium bonded platform was the 2025 SuperSport model, powered by BMW's 3.0-litre TwinPower Turbo, in-line, six-cylinder engine, developing 335bhp (250kW) at 6500rpm, with 500Nm of peak torque at 1250rpm, giving this 1170kg machine a power to weight ratio of 286bhp/tonne.

Claimed performance was zero to 100km/h in 3.9 seconds and a top speed of 267km/h, via an eight-speed ZF auto box.



Suspension was by double wishbones all around, with front and rear anti-roll bars and Nitron single-way-adjustable dampers.

Tyres were 235/45R18 or 235/40R19, front and 255/45R18 or 255/40R19, rear.

Of course we'd loved one, but the down sides we could see were rather odd body lines when viewed from three-quarter rear and a tiny, 41-litre fuel tank.



#### The Morgan factory today

Much of the current factory dates from the mid-1920s and the workshops are very much a product of their time, with brick walls and wrought iron roof trusses. The buildings sit on a gentle slope, down which the chassis travel, until the completed cars are shipped out at the base.

In the case of the Plus Six, this process takes around four weeks, and total production is approximately 800 cars a year. The company has managed to whittle its legendary waiting list from years, down to a mere month.



Work begins in the chassis shop, where the bare chassis are fitted with their pipes and wiring, HVAC components and sound deadening. The engine, drivetrain and suspension are fitted next, with one or two technicians floating between different cars.

By the time the cars are wheeled down the ramp to the next workshop they are essentially complete rolling chassis.

The body frames are made several buildings down the hill, in the wood shop. Some shapes are milled from solid, and others are laminated.



One tool in particular tends to draw visitors' eyes: it's an old oak clamp that's used as a jig for laminating strips of ash. Nobody knows exactly how old it is, but it dates from the 1950s and every open Morgan body since then has been made using the same tool, including the latest Plus Six.

In the body shop, most panels are shaped by hand, starting with flat sheets of aluminium, but the mudguards are produced using the Superform process that, creates a surface that is essentially ready to paint.

In the assembly shop, the body is mated with the chassis that is wheeled down to meet it. It's a noisy environment, with the constant banging of

hammers and the smell of ash timber wafting through the air.

Morgan CEO Steve Morris cut his teeth in this environment at the age of 16 and it's hard to imagine it's changed much since then. Following a 'dry' build, the panels are removed and sent to the paint shop.



When refitted with painted panels, the car moves to the trim shop, where the interior and final electrical items are fitted. Finally, each Morgan is evaluated on local roads and given a pre-delivery inspection.