Inspections for ATVs

- **Brake System Service and Upgrades**
  Brake System Service and Upgrades How to replace worn brake pads on an ATV Steps for bleeding air from ATV brake lines How to rebuild a brake caliper on an ATV When to replace brake rotors for safe stopping Signs of brake fluid contamination in an ATV How to inspect brake lines for damage or leaks Understanding how master cylinders work in ATVs Tips for maintaining consistent brake performance How to adjust parking brake tension on an ATV Steps for installing new brake components on an ATV Why regular brake inspections are essential for ATV safety How to prevent brake fade during long downhill rides
- **Suspension and Steering System Overhaul**
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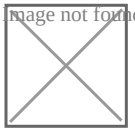
- **About Us**

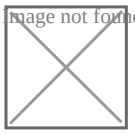
Bleeding air from ATV brake lines is a crucial maintenance task that ensures the safety and performance of your vehicle. Qualified technicians can spot problems before they worsen **used atv mowers for sale** Clemmons. This process involves removing air bubbles trapped within the brake system, which can lead to a spongy brake feel and reduced braking efficiency. Heres a detailed guide on how to effectively bleed the air from your ATVs brake lines.

First, gather all the necessary tools and materials. Youll need a brake bleeding kit, fresh brake fluid compatible with your ATVs system, a wrench that fits the bleeder valve, a clear plastic tube, a container to catch the old fluid, and some rags or paper towels for cleanup. Its important to refer to your ATVs manual for specific recommendations on brake fluid type and any other unique requirements.



Begin by preparing your workspace. Park your ATV on a level surface and ensure it is securely stabilized. If possible, elevate the wheels off the ground using jack stands for easier access to the brake components. Safety should always be your top priority.

Next, locate the master cylinder reservoir, usually found near the handlebars for front brakes or near the rear wheel for rear brakes. Remove the reservoir cap and check the fluid level. If its low, top it up with fresh brake fluid but avoid overfilling. Air can enter through an empty reservoir during bleeding, so maintaining an adequate level is essential.



Now, move to the brake caliper at the wheel furthest from the master cylinder; typically, this means starting with the front right caliper if youre working on both brakes simultaneously. Attach one end of the clear plastic tube to the bleeder valve on the caliper and place its other end into your catch container.

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With everything set up, its time to start bleeding. Have someone help you by slowly pumping and then holding down the brake lever or pedal while you open the bleeder valve slightly with your wrench. You should see old fluid mixed with air bubbles flowing through the tube into your container.

Close the bleeder valve before releasing pressure on either side – this prevents more air from getting sucked back in when letting go of levers or pedals! Repeat this process several times until no more bubbles appear in what comes out - only clean new-looking liquid should be visible now instead!

After successfully clearing one line (or multiple ones if needed), move onto others following similar steps but remember always begin farthest away first then work inward toward nearer parts connected directly onto reservoirs themselves since doing so helps push any still remaining trapped gases towards exit points easier rather than forcing them against flow direction which could cause issues later down road too!

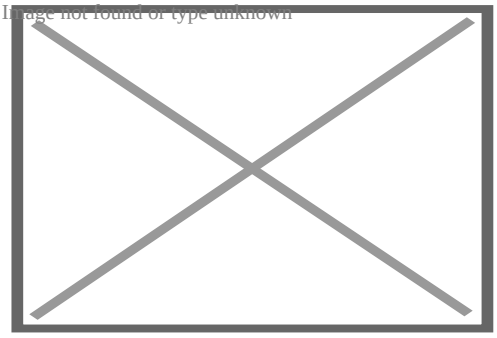
Once finished ensure topping off reservoirs again as needed plus double-check entire setup making sure nothing was missed earlier during procedure like loose connections etc., finally give those newly bled brakes few test squeezes confirming they feel firm responsive without any noticeable sponginess indicating job well done overall!

Remember regular maintenance including tasks like these keeps ATVs running smoothly safely over long periods thus saving money time headaches down line too so dont skip out especially when dealing something critical as braking systems where lives depend upon proper functioning every single time used enjoy rides peace mind knowing everything checked maintained properly beforehand each outing ahead!

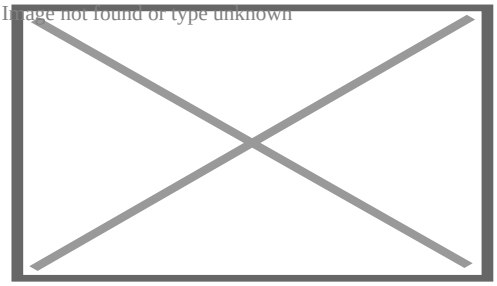
About Three-wheeler

This article **needs additional citations for verification**. Please help improve this article by adding citations to reliable sources. Unsourced material may be challenged and removed.

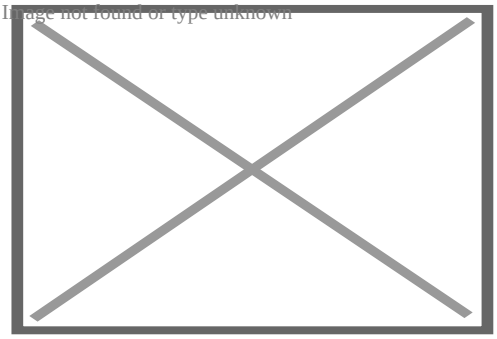
Find sources: "Three-wheeler" – news · newspapers · books · scholar · JSTOR *(January 2012) (Learn how and when to remove this message)*



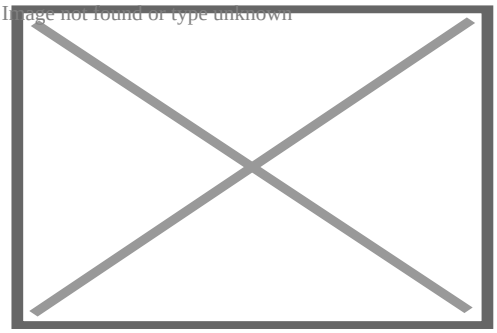
Campagna T-Rex



1932 Morgan Aero 2-Seater Sports



Fuldamobil three-wheeler (Postwar-era Germany)



Tricycle truck in Poland (Gorzów Wlkp)

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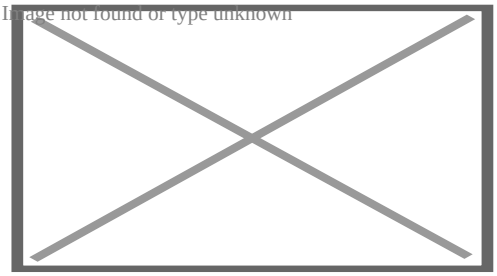


Trihawk, a tadpole-type trike manufactured in California, United States during the 1980s

A **three-wheeler** is a vehicle with three wheels. Some are motorized tricycles, which may be legally classed as motorcycles, while others are tricycles without a motor, some of which are human-powered vehicles and animal-powered vehicles.

Overview

[edit]

Many three-wheelers which exist in the form of motorcycle-based machines are often called trikes and often have the front single wheel and mechanics similar to that of a motorcycle and the rear axle similar to that of a car. Often such vehicles are owner-constructed using a portion of a rear-engine, rear-drive Volkswagen Beetle in combination with a motorcycle front end. Other trikes include All-terrain vehicles that are specially constructed for off-road use.

Three-wheelers can have either one wheel at the back and two at the front (2F1R), (for example: Morgan Motor Company) or one wheel at the front and two at the back (1F2R) (such as the Reliant Robin). Due to better safety when braking, an increasingly popular form is the front-steering "tadpole" or "reverse trike" sometimes with front drive but usually with rear drive. A variant on the 'one at the front' layout was the Scott Sociable, which resembled a four-wheeler with a front wheel missing.[1]

Three-wheelers, including some cyclecars, bubble cars and microcars, are built for economic and legal reasons: in the UK for tax advantages, or in the US to take advantage of lower safety regulations, being classed as motorcycles. As a result of their light construction and potential better streamlining, three-wheeled cars are usually less expensive to operate.[*citation needed*]

Some inexpensive three-wheelers have been designed specifically to improve mobility for disabled people.[2]

Three-wheeler transport vehicles known as auto rickshaws are a common means of public transportation in many countries in the world, and are an essential form of urban transport in many developing countries such as India and the Philippines.

History

[edit]

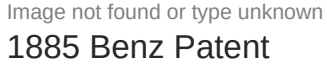
Early automotive pioneer Karl Benz developed a number of three-wheeled models.[3] One of these, the Benz Patent Motorwagen,[4] is regarded as the first purpose-built automobile. It was made in 1885.

In 1896, John Henry Knight showed a tri-car at The Great Exhibition.[3]

In 1897, Edward Butler made the Butler Petrol Cycle, another three-wheeled car.

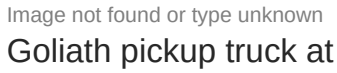
A Conti 6 hp Tri-car competed in (but did not complete) a 1907 Peking to Paris race sponsored by a French newspaper, *Le Matin*.[5]

- 1885 Benz Patent Motorwagen



1885 Benz Patent Motorwagen

- Goliath pickup truck at a meeting for vintage cars in the 1990s



Goliath pickup truck at a meeting for vintage cars in the 1990s

Davis D-2 Divan, at the National Automotive and Truck Museum, Auburn, Indiana, United States

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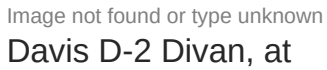

Davis D-2 Divan, at the National Automotive and Truck Museum, Auburn, Indiana, United States

Davis 494, at the National Automotive and Truck Museum, Auburn, Indiana, USA

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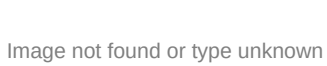

Davis 494, at the National Automotive and Truck Museum, Auburn, Indiana, USA
Velorex was a manufacturing cooperative in Solnice, Czechoslovakia, formed in 1936 to satisfy dem

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Velorex was a manufacturing cooperative in Solnice, Czechoslovakia, formed in 1936 to satisfy demand for small, inexpensive city cars.
Mazda T2000 truck 1957â€“1974, length 6.08Â m, width 1.84Â m, max speed 100Â km/h

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Mazda T2000 truck 1957–1974, length 6.08 m, width 1.84 m, max speed 100 km/h
An early Daihatsu Midget, which would serve as the basis for auto rickshaws that proliferate across S

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An early Daihatsu Midget, which would serve as the basis for auto rickshaws that proliferate across South and Southeast Asia

- Reliant Robin 3-wheeler car.

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Reliant Robin 3-wheeler car.
2016 Pembleton Supersports

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2016 Pembleton Supersports

Configurations

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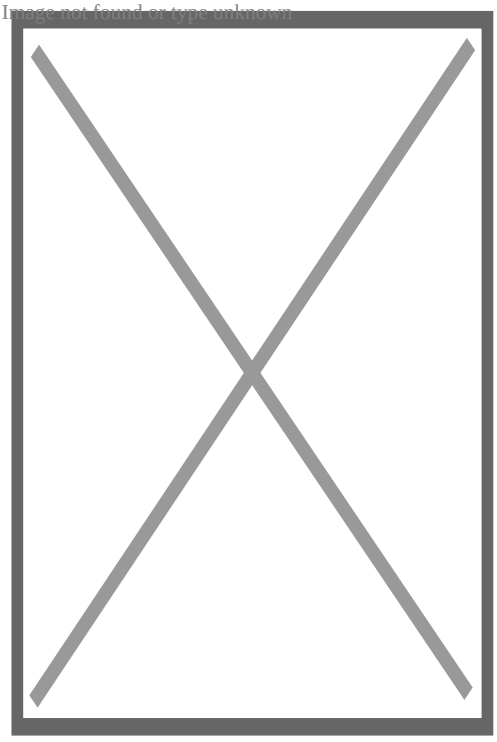


Diagram comparing delta and tadpole layouts

Two front

[edit]

A configuration of two wheels in the front and one wheel at the back presents two advantages: it has improved aerodynamics, and that it readily enables the use of a small lightweight motorcycle powerplant and rear wheel. This approach was used by the Messerschmitt KR200 and BMW Isetta. Alternatively, a more conventional front-engine, front wheel drive layout as is common in four-wheeled cars can be used, with subsequent advantages for transversal stability (the center of mass is further to the front) and traction (two driven wheels instead of one). Some vehicles have a front engine driving the single rear wheel, similar to the rear engine driving the rear wheel. The wheel must support acceleration loads as well as lateral forces when in a turn, and loss of traction can be a challenge.

A new tadpole configuration has been proposed with a rear engine driving the front wheels. This concept (Dragonfly Three Wheeler[6]) claims both stability and traction (two driven wheels), as well as a unique driving experience.

With two wheels in the front (the "tadpole" form or "reverse trike") the vehicle is far more stable in braking turns, but remains more prone to overturning in normal turns compared to an equivalent four-wheeled vehicle, unless the center of mass is lower and/or further forward. Motorcycle-derived designs suffer from most of the weight being toward the rear of the vehicle.[*citation needed*]

For lower wind resistance (which increases fuel efficiency), a teardrop shape is often used.[*citation needed*] A teardrop is wide and round at the front, tapering at the back. The three-wheel configuration allows the two front wheels to create the wide round surface of the vehicle. The single rear wheel allows the vehicle to taper at the back. Examples include the Aptera (solar electric vehicle) and Myers Motors NmG.

Two rear

[edit]

Having one wheel in front and two in the rear for power reduces the cost of the steering mechanism but greatly decreases lateral stability when cornering while braking.

When the single wheel is in the front (the "delta" form, as in a child's pedal tricycle), the vehicle is inherently unstable in a braking turn, as the combined tipping forces at the center of mass from turning and braking can rapidly extend beyond the triangle formed by the contact patches of the wheels. This type, if not tipped, also has a greater tendency to spin out ("swap ends") when handled roughly.[*citation needed*]

Lateral stability[7]

[edit]

The disadvantage of a three-wheel configuration is that lateral stability is lower than with a four-wheeled vehicle.

With any vehicle, an imaginary line can be projected from the vehicles centre of mass to the ground, representing the force exerted on the vehicle by its mass. With the vehicle stationary, the line will be vertical. As the vehicle accelerates, that imaginary line tilts backward, remaining anchored to the centre of mass the point at which the line intersects the ground moves backward. As you brake it moves forward, with cornering it moves sideward. Should the point at which this line intersects the ground move outside of the boundary formed by connecting the tyre contact patches together (a rectangle for a four-wheeled car, or a triangle for a trike) then the vehicle will tip and eventually fall over. This is true for any vehicle.

With all vehicles it is critical that the vehicle should be engineered to slide before this point of instability is reached.

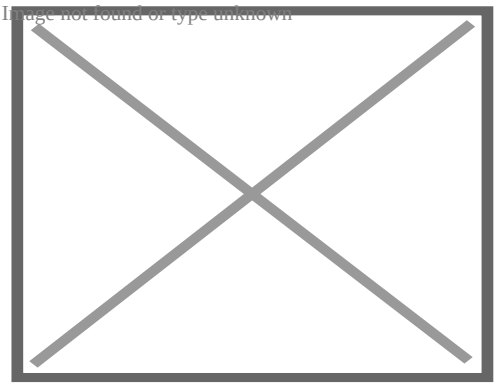
This can be achieved in several ways:

- by placing the center of mass closer to the ground
- by placing the center of mass closer to the axle with two wheels (for three wheelers)
- by increasing the track width
- by limiting the grip provided by the tyres, such that the vehicle loses adhesion before it starts to tip.
- By tilting some or all of the vehicle as it corners.

In the case of a three-wheeled ATV, tipping may be avoided by the rider leaning into turns.

Tilting option

[edit]
Main article: Tilting three-wheeler



Tripendo recumbent tricycle, a tilting three-wheeler

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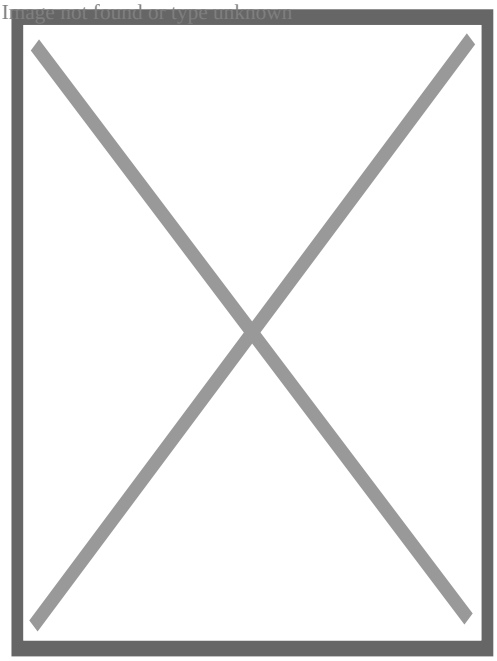

Vandenbrink Carver

To improve stability some three-wheelers are designed to tilt while cornering like a motorcyclist would do. The tilt may be controlled manually, mechanically or by computer.

A tilting three-wheeler's body or wheels, or both, tilt in the direction of the turn. Such vehicles can corner safely even with a narrow track.

Some tilting three-wheelers could be considered to be forms of feet forward motorcycles or cabin motorcycles or both.

Electric three wheelers

[edit]
Main article: Electric vehicle. See also: Electric tricycle (disambiguation)

Battery-powered three wheelers

[edit]

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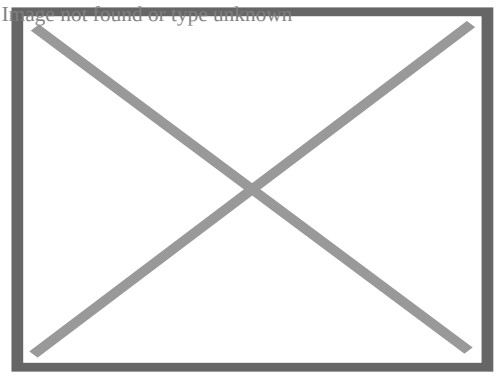


Toyota i-Road, a three-wheeled battery powered personal mobility vehicle

Main articles: Battery electric vehicle and Electric rickshaw

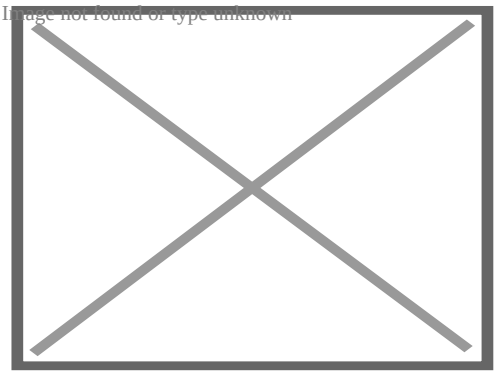
Three-wheeled battery powered designs include:

- Aptera (solar electric vehicle)
- Arcimoto
- CityEl
- Commuter Cars Tango
- Cree SAM
- ElectraMeccanica SOLO
- Myers Motors NmG (formerly Corbin Sparrow)
- Nobe GT100
- Toyota i-Road
- Triac
- Vanderhall Edison 2
- ZAP Xebra
- EWheels EW 36(mobility scooter)

Solar-powered three wheelers

[edit]
Main article: Solar vehicle

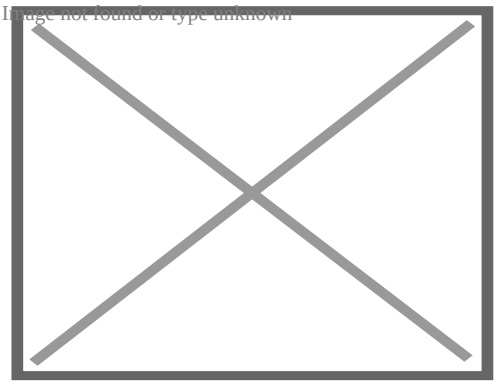
Here are three notable examples of solar-powered three wheelers; two race cars, the Infinium and the Sky Ace TIGA, and a vehicle planned for production, the Aptera.



Infinium, winner of 2010 American Solar Challenge

The Infinium, built by the University of Michigan Solar Car Team, came in 3rd place in the 2009 World Solar Challenge held in Australia, and won the 2010 American Solar Challenge.

Ashiya University's Sky Ace TIGA achieved 91.332 kilometres per hour (56.751 mph) at Shimojishima Airport, in Miyakojima, Okinawa, Japan, to win the Guinness World Record, on 20 August 2014.[8] It took the record from another three-wheeler, Sunswift IV, designed and built at the University of New South Wales in Australia,[9] by a margin of almost 3 km/h.

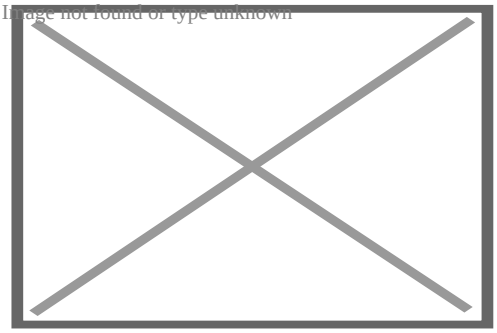


Solar panels on the hood, roof, dashboard and hatch of the Aptera EV

The Aptera solar electric vehicle[10] uses a tadpole layout and is being designed to have a top speed of over 100 mph. The Aptera uses 42 KW in-wheel electric motors[11] and can be ordered with two (front-wheel drive) or three (all-wheel drive) motors. The Aptera's roof and dashboard, and optionally its hood and hatch, are fitted with solar panels, with the full compliment being designed to add a range of up to 40 miles per day and 11,000 miles per year in the sunniest climates. First customer availability is planned for before the end of 2024.[12]

Steam-powered three wheelers

[edit]



Cugnot's *fardier à vapeur*, as preserved at the Musée des Arts et Métiers, Paris, France

Main articles: Steam tricycle and Steamroller

The world's first full-size self-propelled land vehicle was a three-wheeler. French Army Captain Nicolas-Joseph Cugnot's 1770 *fardier à vapeur* (steam dray), a steam tricycle with a top speed of around 3 km/h (2 mph), was intended for hauling artillery.[13]

Another of the earliest preserved examples is the Long steam tricycle, built by George A. Long around 1880 and patented in 1883,[14][15] now on display at the Smithsonian Institution.

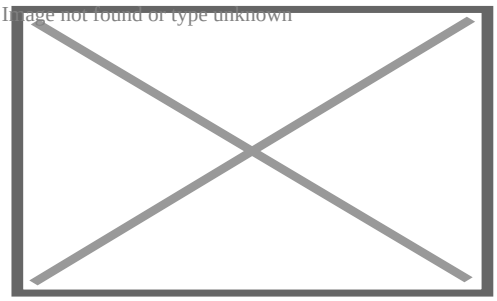
Wind-powered three wheelers

[edit]

The Whike is a recumbent tricycle with a sail, made in the Netherlands.

All-terrain vehicles

[edit]
Further information: All-terrain vehicle § Three-wheeled ATVs

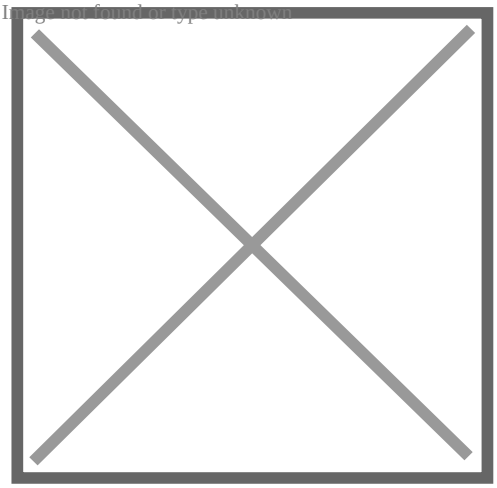


Honda, Suzuki and Yamaha all-terrain vehicles

Due to the incidence of injuries and deaths related to their use, a 10-year ban, entirely voluntary for manufacturers, was placed on the sale of new three-wheeled all-terrain vehicles in the United States in January 1988.[*citation needed*] More injuries were sustained by riders by not applying a proper riding technique, and lack of wearing proper safety gear such as helmets and riding boots. In a search conducted by the Consumer Product Safety Commission, it was determined that "no inherent flaw was found in the three wheel design".[*citation needed*]

Registration

[edit]



Bond Bug at Silverstone

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The examples and perspective in this section **may not represent a worldwide view of the subject**. You may improve this section, discuss the issue on the talk page, or create a new section, as appropriate. *(October 2015) (Learn how and when to remove this message)*

In the U.S, the National Highway Traffic Safety Administration defines and regulates three-wheeled vehicles as motorcycles.[16] However, in 2015 a bill was introduced in Congress that would prevent some three wheeled vehicles from being classified as motorcycles in the United States, instead creating a new classification for "autocycles".[17][18]

Driver's license and registration requirements vary on a state-by-state basis. Some states require drivers of three wheeled vehicles to have a motorcycle license and register the vehicle as a motorcycle. Some states, including Virginia, Kansas, and Indiana, classify some three wheeled vehicles as autocycles. Virginia defines an autocycle as "a three-wheeled motor vehicle that has a steering wheel and seating that does not require the operator to straddle or sit astride and is manufactured to comply with federal safety requirements for motorcycles."[19] Indiana defines it as "a three (3) wheeled motor vehicle in which the operator and passenger ride in a completely or partially enclosed seating area that is equipped with:(1) a rollcage or roll hoops; (2) safety belts for each occupant; and (3) antilock brakes;and is designed to be controlled with a steering wheel and pedals."[20] In other jurisdictions, such as British Columbia, Canada, and Connecticut, a three-wheeled vehicle with an enclosed passenger compartment or partially enclosed seat is considered an automobile.[*citation needed*]

Examples

[edit]

Two front wheels

[edit]

Name	Country	Years manufactured	Comments
Léon Bollée Voiturette	France	1895–?	
TriPodCars[21] Tripod 1	Australia	2012–?	400 kg Reverse Trike, Bandit 1250, ZX14R (200+ hp) and EV
Berkeley Cars Berkeley T60	England	1959	
Egg	Switzerland	1896–99	
Advance 6 hp air-cooled Tri Car and 9 hp water-cooled Tri Car[22]	England	1902–12	
Humber Tricar[23][24]	England	1904	
Riley Olympia Tricar [25]	England	1904	[26]

Mars Carette[27]	England	1904–05	Mars Motors Co existed in Finchley, London, White and Poppe water-cooled engine, Single-cylinder, 3.3 kW
Lagonda Tricar[28]	England	1904–07	total production: 69 cars
Anglian	England	1905–07	
Armadale	England	1906–07	
Ranger Cub	England	1970–1980	Reverse Trike/Tadpole, A-Series engine 848-1275cc
Morgan V-Twin and F-Series	England	1911–39, 1932–52	Morgan Super Sports 2-Seater 1937
American Tri-Car	United States	1912	
Birmingham Small Arms Company Three Wheeler	England	1929–36	1100cc engine[29]
Zaschka	Germany	1929	Folding three-wheeler: Zaschka Three-wheeler 1929
Dymaxion car	United States	1933	Concept car designed by Buckminster Fuller
Mathis VEL 333	France	1946	3 seats, flat-twin front engine, aluminium body, production less than 10 units
Fend Flitzer	Germany	1948 - 1951	1 seat, Messerschmitt kabinenroller precursor, production about 250 units
1951 Hoffmann	Germany	1951	2 seats, aluminium body, engine mounted on the rear wheel steering pivot
Velorex Oskar and other models	Czechoslovakia	1951–71	Originally with leather bodies
Isetta	UK	1957–62	Three-wheeled version of the Isetta built in the UK to take advantage of tax and licensing regulations
Scootacar	UK	1957–64	
Messerschmitt KR175	Germany	1953–55	
Messerschmitt KR200	Germany	1955–64	
Peel P50	Isle of Man	1963–64	Smallest production car ever built
HM Vehicles Free-way	United States	1979–82	
Campagna T-Rex	Canada	1996–present	
Malone Car Company F1000|Skunk SS|TAZR	United Kingdom	1999–present	High-power internal combustion and pure electric versions released November 2010

Cree SAM	Switzerland	2001	Electric, only 80 produced
Myers Motors NmG ("No more Gas")	United States	2006–present	Single-occupant all-electric plug-in
BRP Can-Am Spyder RoadsterCan-Am Spyder Roadster	Canada	2007–present	The Can-Am Spyder is a three-wheeled motorcycle manufactured by Bombardier Recreational Products.
Brudeli 645L	Norway	2008–	
Moonbeam	United States	2008–present	100 mpg DIY, fabric-covered car based on parts from two Honda 150cc motorscooters[30]
Triac	United States	2009–2011	Electric, never entered production
XR-3 Hybrid	United States	Plans–2008, Kit–2009	Front 3-cylinder diesel (125 mpg), rear electric 40 mile range (220 mpg when used as a hybrid)[31]
Aptera (solar electric vehicle)	United States	2022 planned	Solar-powered Electric
Triton Trike	United States	2000–present	Gas-powered, 42+ mpg, front-wheel drive, custom builds and kits available
Nobe GT100	Estonia & United States	2021 planned	Electric, powered at all 3 wheels
Polaris Slingshot	United States	2015–present	
Vanderhall Laguna Roadster	United States	2016–2018	Exotic Auto-cycle, mono-aluminum chassis, carbon fiber body, 200 HP, 1550 pounds dry weight, side-by-side seating, fwd. 1.4 liter turbo GM power plant. 6 speed Automatic with paddle shift option. Manufactured by Vanderhall Motor Works in Provo, Utah U.S.A
Vanderhall Venice	United States	2017–present	The mainstay of the Vanderhall line up, the Venice brings the soul of roadster motoring while extending effortless performance in kind.[32]
Vanderhall Carmel	United States	2020–present	The Vanderhall Carmel brings more luxury and convenience to the Carmel lineup. With provisions to accommodate a removable capshade, the Carmel promises additional class and comfort for your journey.[33]
Vanderhall Edison	United States	2020–present	The Edison2: A fully electric roadster that combines refined and eye-catching design while maintaining classic, elegant lines. Unplug and play has been redefined [34]

Elio Motors	Shreveport, LA, United States	Awaiting funding	Two passenger fully enclosed cockpit with car controls
Girfalco Azkarra	Canada	2017	All-electric two-passenger three-wheeled vehicle, possibly the quickest three-wheeler
Go3Wheeler	United States	2014	single person three wheeler
Corbin Sparrow			
Piaggio MP3			
Tri-Magnum	United States		Tilting 3-wheeler capable of seating two people.[35]
Volkswagen GX3			
Morgan 3-Wheeler	England	2012–present	The power train is a 1983cc 'V-twin' fuel injected engine mated to a Mazda 5 speed (and reverse) gearbox
Fuel Vapours Alé	Canada	2005–present	Prototype. Gets 92 mpg.
Arcimoto FUV	United States	2019–present	Two passenger all-electric, 102 mile range City
Fiberfab Scarab STM	United States	1976	Kit car with canopy door manufactured by Fiberfab
Bricklin 3EV	United States	Planned	Two passenger electric vehicle from Malcolm Bricklin.[36]

Two rear wheels

[edit]

Name	Country	Years manufactured	Comments
Apino	Brazil	unknown	Mini Truck
Benz Patent Motorwagen	Germany	1886–93	
Eco-Fueler	USA	2009–2011	2 seater built in Oregon.[37]
La Va Bon Train	France	1904–10	50–100 believed built
Davis D-2 Divan	United States	1947–48	about 13–17 built, including the 494, a Jeep-like military vehicle[38]
Scammell Scarab	England	1948–67	
Autoette	United States	1948–70	
Daihatsu Bee	Japan	1951–1952	
Daihatsu Midget	Japan	1957–72	

Mazda T-2000	Japan	1957–74	
Mazda K360	Japan	1959–69	
Mazda T600	Japan	1959–71	
Kia K-360	South Korea	1962–1973	Kia's first truck (OEM Mazda K-360)
Kia T-1500	South Korea	1963–?	1484 cc, 60 hp, four cylinder and a maximum load of 1.5 tons. (OEM Mazda T-1500)
Kia T-600	South Korea	1969–1974	577cc, 20 HP and 500 kg load. Top speed of 75 km/h. 7726 produced (OEM Mazda T-600)
Kia T-2000	South Korea	1967–1981	1985 cc, 81 hp, four cylinder and a maximum load of 2 tons. 15952 produced (OEM Mazda T-2000)
Piaggio Ape	Italy	1948–present	
Electra-King	United States	1964?–1980s?	Two-seater electric car[39]
Bond 875	England	1965–70	
Bond Bug	England	1970–74	
Reliant Robin	England	1973–81, 1989–2002	
Reliant Regal	England	1953–1973	An example of this vehicle is the iconic van belonging to Del Boy and Rodney Trotter in the long-running BBC sitcom Only Fools and Horses, though it is often incorrectly referred to as a Reliant Robin.
GM Lean Machine[40][41]	United States	1980s	Tilt, concept car[42]
TriVette	United States	1974–1976	
Twike	Germany	1995–present	Electric-human-power hybrid, developed in Switzerland
ZAP Xebra	United States	2006–2009	electric power
eTuk	United States	2014–	re-designed tuk tuk for the US Market, including an all-electric motor[43]
Snyder ST600-c	United States	2011–2012	Imported by Snyder Technologies / Wildfire Motors, this is a rebrand of the Fulu Motors å¯Œè·¯é‡‘éª•é©¬, Fulu Jinjunma in English. Referred to as the 09 golden horse internally.
Carver	Netherlands	2007–2009	Tilt
CityEl	Denmark		Mini-El, City-El
CLEVER			

Harley-Davidson Servi-Car	United States	1932-1973[44]
Harley-Davidson Tri Glide	United States	since 2009

See also

[edit]

- Four-wheeler

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External links

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- Complete A-Z list of three-wheelers since 1940

About Can-Am motorcycles

This article is about Can-Am motorcycles from 1972 to 1987. For the Can-Am ATV model range, see Can-Am Off-Road. For the Can-Am Roadster model range, see BRP Can-Am Spyder Roadster.

Can-Am Motorcycles

Headquarters	Valcourt, Canada
Products	Motorcycles
Parent	Bombardier Corporation
Website	can-am.brp.com/us/en/

Can-Am is a Canadian subsidiary of Bombardier Recreational Products (BRP) founded in 1972 and based in Valcourt, Quebec.[1][2] The company produced off-road motorcycles from 1972 to 1987. In 1997, the company was reformed and began production of ATV vehicles as well as the Can-Am Spyder three-wheeled motorcycle. In 2024 Can-Am released two new electric motorcycle models.[3]

History

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Brand history

[edit]

Can-Am was created as a subsidiary of the Bombardier Corporation in 1972.[4] The barn that housed the original Can-Am headquarters still exists at the Bombardier test facility within the Circuit Yvon Duhamel and is located a few miles south of Valcourt, Quebec.[1] The right side of the barn housed the offices for design and engineering, and the left side was used for fabrication.[2] Can-Am's name was the result of a Bombardier employee competition based on the anticipated Canadian vs. American market, though the existence of the Can-Am racing series necessitated the purchase of rights to the name.[2]

Based on the Bultaco design principle of a standard-size frame that could accommodate a range of differently sized engines, engineers Gary Robison, Bob Fisher, and Camille Picard, and former 500cc Motocross World Champion Jeff Smith designed a competition motorcycle from scratch using engines supplied by the Austrian firm, Rotax, another Bombardier subsidiary.[1][5] Their design featured steering head bearing cups that allowed for the adjustment of the steering head angle; these were mainly driven by simplified production on the assembly line.[2]

The machines made an immediate impact, with riders winning Gold, Silver and bronze medals at the International Six Days Trial.[1] The International Six Days Trial, now known as the International Six Days Enduro, is a form of off-road motorcycle Olympics which is the oldest annual competition sanctioned by the FIM dating back to 1913.[6]

In 1974, the Can-Am factory racing team swept the AMA 250cc motocross national championship with Can-Am riders Gary Jones, Marty Tripes and Jimmy Ellis, finishing first, second and third in the championship although, Tripes had raced for most of the season on a Husqvarna motorcycle before being hired by Can-Am for the last race of the season.[4][7][8][9]

Can-Am enduro rider Skip Olson finished second to Dick Burleson in the 1976 AMA Enduro national championship.[10] Can-Am's motorcycle racing success enhanced the brand's image and they gained a reputation for their high horsepower outputs.[4][11] In 1983, Can-Am released a 250 cc road racing motorcycle. Using two 125 cc Rotax motors with a conjoined crankshaft, the motorcycle featured a bespoke frame with an aluminum swingarm.[2]

When the 1973 oil crisis precipitated a decrease in sales of recreational vehicles, Bombardier was forced to reduce their snowmobile and motorcycle production.[12] Bombardier then shifted its priority from recreational products towards the transit equipment industry and then, several years later, into aircraft manufacturing.[12] As a result, investments in product development were reduced substantially and, Can-Am was unable to keep pace with Japanese manufacturers as rapid advancements in motocross technology progressed during the 1970s and 1980s.[12][13] In 1983, Bombardier licensed the brand and outsourced development and production of the Can-Am motorcycles to Armstrong-CCM Motorcycles of Lancashire, England.[4][13] 1987 was the final year of Can-Am motorcycle production.[1][4]

Rebirth and rebranding

[edit]

In 2006, Bombardier reintroduced the Can-Am brand with its Can-Am Off-Road range of all-terrain vehicles (ATV). In 2007, the Can-Am brand was also used for the Can-Am Spyder, a new three-wheeled roadster.

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