

= Honda Super Cub =

The Honda Super Cub is a Honda underbone motorcycle with a four stroke single cylinder engine ranging in displacement from 49 to 109 cc (3 @. @ 0 to 6 @. @ 7 cu in) .

In continuous manufacture since 1958 with production surpassing 60 million in 2008 , and 87 million in 2014 , the Super Cub is the most produced motor vehicle * in history . Variants include the C100 , C50 , C70 , C90 , C100EX and C70 Passport .

The Super Cub 's US advertising campaign , You meet the nicest people on a Honda , had a lasting impact on Honda 's image and on American attitudes to motorcycling , and is often used as a marketing case study .

= = Development = =

The idea for a new 50 @-@ cubic @-@ centimetre (3 @. @ 1 cu in) motorcycle was conceived in 1956 , when Honda Motor 's Soichiro Honda and Takeo Fujisawa toured Germany and witnessed the popularity of mopeds and lightweight motorcycles . Soichiro Honda was primarily the engineering and production leader of the company , always with an eye towards winning on the racetrack , while his close partner Fujisawa was the man of finance and business , heading up sales and formulating strategies intended to dominate markets and utterly destroy Honda Motor 's competitors . Fujisawa had been thinking about a long term expansion strategy , and unlike other Japanese companies , they did not want to simply boost production to cash in on the recent economic boom in Japan . A small , high @-@ performance motorcycle was central to his plans . Upwardly mobile consumers in postwar Europe typically went from a bicycle to a clip on engine , then bought a scooter , then a bubble car , and then a small car and onwards . Fujisawa saw that a motorcycle did not fit in this pattern for the average person , and he saw an opportunity to change that . Soichiro Honda was at the time tired of listening to Fujisawa talk about his new motorcycle idea ; Honda came to Europe to win the Isle of Man TT race and wanted to think about little else .

Fujisawa and Honda visited Kreidler and Lambretta showrooms , as well as others , researching the kind of motorcycle Fujisawa had in mind . Fujisawa said the designs had " no future " and would not sell well . His concept was a two wheeler for everyman , one that would appeal to both developed and developing countries , urban and rural . The new motorcycle needed to be technologically simple to survive in places without up to date know how and access to advanced tools or reliable spare parts supplies . The common consumer complaints of noise , poor reliability , especially in the electrics , and general difficulty of use would have to be addressed . Because Honda was a large company growing larger , it needed a mass appeal product that could be produced on an enormous scale . The design had to be sorted out before production began , because it would be too costly to fix problems in the vast numbers that were to be manufactured . The scooter type nearly fitted the bill , but was too complex for developing countries to maintain , and the small wheels did poorly on badly maintained or nonexistent roads . Another of Fujusawa 's requirements was that it could be ridden with one hand while carrying a tray of soba noodles , saying to Honda , " If you can design a small motorcycle , say 50 cc with a cover to hide the engine and hoses and wires inside , I can sell it . I don 't know how many soba noodle shops there are in Japan , but I bet you that every shop will want one for deliveries . "

Once interested , Soichiro Honda began developing the Super Cub on his return to Japan . The following year Honda displayed a mockup to Fujisawa that finally matched what he had in mind , Fujisawa declaring the annual sales would be 30 @, @ 000 per month , half again as many as the entire monthly two @-@ wheeler market in Japan . His goal was to export motorcycles on a scale yet unseen in the economic disorder of postwar Japan , when most companies ' halting trade efforts were handled through foreign trading companies . Honda would have to establish its own overseas subsidiary to provide the necessary service and spare parts distribution in a large country like the United States . To this end American Honda Motor Company was founded in 1959 . In 1961 a sales network was established in Germany , then in Belgium and the UK in 1962 , and then France in 1964 .

The Honda Juno had been the first scooter to use polyester resin , or fiberglass reinforced plastic (FRP) , bodywork , and even though production of the Juno had stopped in 1954 as a result of Honda Motor 's financial and labor problems at the time , Fujisawa continued to encourage research in polyester resin casting techniques , and these efforts bore fruit for the Super Cub . The new motorcycle 's fairing would be polyethylene , the most widely used plastic , which reduced weight over FRP , but Honda 's supplier had never made such a large die cast before , so the die had to be provided by Honda . The Super Cub was the first motorcycle ever to use a plastic fairing . Motorcycling historian Clement Salvadori wrote that the plastic front fender and leg shields were , " perhaps the Cub 's greatest contribution ; plastic did the job just as well as metal at considerably lower cost . " The technology developed in the Isle of Man TT racing program was equally vital to the new lightweight motorcycle , making possible 3 @. @ 4 kilowatts (4 @. @ 5 hp) from a 50 cc four @- @ stroke Honda engine , where the first engine the company built a decade earlier , a " fairly exact copy " of the 50 cc two stroke war @- @ surplus Tohatsu engine Honda had been selling as motorized bicycle auxiliary engine , had only a 0 @. @ 37 ? 0 @. @ 75 kilowatts (0 @. @ 5 ? 1 hp) output . Honda 's first four stroke , the 1951 E @- @ type , had just a little more power than the Super Cub , 3 @. @ 7 kilowatts (5 bhp) , with nearly triple the displacement , 146 cc (8 @. @ 9 cu in) .

To make the new motorcycle , Honda built a new ¥ 10 billion factory in Suzuka , Mie to manufacture 30 @, @ 000 , and with two shifts , 50 @, @ 000 , Super Cubs per month . The factory was modeled on the Volkswagen Beetle production line in Wolfsburg , Germany . Until then , Honda 's top models had sold only 2 @, @ 000 to 3 @, @ 000 per month , and observers thought the cost of the new plant too risky an expenditure . Edward Turner of BSA went to Japan to see the motorcycle industry in September 1960 , and said that investments the size of the Suzuka plant were " extremely dangerous " because the US motorcycle market was already saturated . When completed in 1960 , the Suzuka Factory was the largest motorcycle factory in the world , and was a model for Honda 's mass production facilities of the future . The economies of scale achieved at Suzuka cut 18 % from the cost of producing each Super Cub when Suzuka could be run at full capacity , but in the short term Honda faced excess inventory problems when the new factory went into operation before the full sales and distribution network was in place .

= = Design = =

The Super Cub has been compared to the Ford Model T , Volkswagen Beetle and the Jeep as an icon of 20th century industry and transport . The C100 used a pressed steel monocoque chassis , with the horizontal engine placed below the central spine , a configuration now called the ' step through ' or ' underbone ' motorcycle . By some criteria , the type of motorcycle the Super Cub falls into is difficult to classify , landing somewhere between a scooter and a motorcycle , and sometimes it was called a moped , " step @- @ thru " , or scooterette .

A plastic fairing ran from below the handlebars and under the footpegs , protecting the rider 's legs from wind and road debris , as well as hiding the engine from view . This design was like the full enclosure of a scooter , but unlike a scooter the engine and gearbox unit was not fixed to the rear axle . This had several benefits . It moved the engine down and away from the seat , detaching the rear swingarm motion from the drivetrain for lower unsprung weight . It also made engine cooling air flow more direct , and made it possible to fit larger wheels . Placing the engine in the center of the frame , rather than close to the rear wheel , gave it proper front @- @ rear balance . The fuel tank was located under the hinged seat , which opened to reveal the fuel filler inlet . The 17 inch wheels , in comparison to the typical 10 inch wheels of a scooter , were more stable , particularly on rough roads , and psychologically made the motorcycle more familiar , having an appearance closer to a bicycle than a small @- @ wheel scooter .

The pushrod overhead valve (OHV) air @- @ cooled four stroke single cylinder engine had a 40 @- @ by @- @ 39 @- @ millimetre (1 @. @ 6 in × 1 @. @ 5 in) bore × stroke , displacing 49 cubic centimetres (3 @. @ 0 cu in) , and could produce 3 @. @ 4 kilowatts (4 @. @ 5 hp) at 9 @, @ 500 rpm , for maximum speed of 69 km / h (43 mph) , under favorable conditions . The low

compression ratio meant the engine could consume inexpensive and commonly available low octane fuel , as well as minimizing the effort to kick start the engine , making the extra weight and expense of an electric starter an unnecessary creature comfort . Though some of the many Super Cub variations came with both kick and electric start , the majority sold well without it . Even the latest 2011 model year Japanese domestic market (JDM) Super Cub 50 and Super Cub 110 versions , with modern technology and conveniences like fuel injection and a fuel gauge , were not offered with an electric start option .

The sequential shifting three speed gearbox was manually shifted , but clutchless , without the need for a clutch lever control , using instead a centrifugal clutch along with a plate clutch slaved to the footchange lever to engage and disengage the gearbox from the engine . While not intuitive to learn , once the rider got used to it , the semi @-@ automatic transmission , " took the terror out of motorcycling " for novice riders . Unlike many scooter CVTs , the centrifugal clutch made it possible to push start the Super Cub , a useful advantage if the need arose .

The early Super Cubs used a 6 volt ignition magneto mounted on the flywheel , with a battery to help maintain power to the lights , while later ones were upgraded to capacitor discharge ignition (CDI) systems . The lubrication system did not use an oil pump or oil filter , but was a primitive splash @-@ fed system for both the crankcase and gearbox , with a non @-@ consumable screen strainer to collect debris in the engine oil . Both the front and rear brakes were drums . On both the front and rear wheels were 2 @. @ 25 " × 17 " wire spoke wheels , with full @-@ width hubs .

Honda recommended daily checks of the lights , horn , tire pressure , brakes , fuel and oil level , and a weekly check of the battery electrolyte level . The new engine break in maintenance was done at 320 kilometres (200 mi) , requiring adjustment of the valve tappets and contact breaker points , and an oil change , and the rider was advised to stay under 48 kilometres per hour (30 mph) for the first 800 kilometres (500 mi) . Every 1 @, @ 600 kilometres (1 @, @ 000 mi) the spark plug needed cleaning , and the chain adjustment checked , and every 3 @, @ 200 kilometres (2 @, @ 000 mi) an oil change , breaker point check , and valve adjustment was due . At 8 @, @ 000 kilometres (5 @, @ 000 mi) , major maintenance was due , requiring the removal and cleaning of the carburetor , drive chain , exhaust silencer , and wheel bearings . The rider closed a manual choke to aid in starting at cold temperatures . By the standards of the day , this was a simple motorcycle , with minimal maintenance demands , and it earned a reputation for high reliability .

= = You meet the nicest people on a Honda = =

In June 1963 in US media , Honda began the 12 @-@ year @-@ long advertising campaign " You meet the nicest people on a Honda " , created by Grey Advertising . Grey had bought the idea from a UCLA undergraduate student , who had created the concept for a class assignment . The event marked the beginning of the decline of domestic and British motorcycle brands in the US market , and the rise of Honda and the other Japanese companies . In December 1965 , Edward Turner said the sale of small Japanese motorcycles was good for BSA , by attracting new riders who would graduate to larger machines , not anticipating that the Japanese would advance over the next 5 years to directly threaten British bikes with technically sophisticated models such as the Honda CB750 , and the Kawasaki Z1 . As a case study in business and marketing , the campaign is still remembered half a century later , with one strategic management textbook saying , " Honda and the Supercub is probably the best known and most debated case in business strategy . " It was credited with having " invented the concept of lifestyle marketing . "

Specific elements of the Super Cub 's design were integral to the campaign , such as the enclosed chain that kept chain lubricant from being flung on the rider 's clothing , and the leg shield that similarly blocked road debris and hid the engine , and the convenience of the semi @-@ automatic transmission . Presenting the Super Cub as a consumer appliance not requiring mechanical aptitude and an identity change into " a motorcyclist " , or worse , " a biker " , differentiated Honda 's offering , because , " the dedication required to maintain bikes of that era limited ownership to a relatively small demographic , often regarded as young men known for their black leather jackets and snarling demeanors . "

Rather than remaining limited to trying to convince traditional downmarket male buyers to switch to Honda from other brands with the macho approach of most motorcycle advertising at the time , Honda broke new ground . The ad campaign sought to improve the image of motorcycling in general and expand the overall size of the motorcycle market by attracting new riders . In a stroke of good fortune for Honda , Brian Wilson and Mike Love composed the 1964 song " Little Honda " , extolling the joys of riding the Honda 50 , and even inviting the listener to visit their local Honda dealership , in language that sounded as if it could have been written , or at least paid for , by Honda 's advertising copywriters , yet it was not a commercial jingle . The song was released by The Hondells in 1964 , followed by the release of the original recording by The Beach Boys . In 1965 The Hondells released " You Meet the Nicest People on a Honda " , another song promoting the Super Cub , which was actually used in Honda 's TV spots , as a B side to their version of " Sea Cruise . "

The long @-@ running campaign , including the slogan , the music , and the upbeat images of respectable , middle and upper @-@ class people , particularly women , riding Hondas became closely associated with the Honda brand ever since . The image Honda created was contrasted with the one percenter " bad boy " biker and became a focal point of Japan bashing boosterism of US @-@ made Harley @-@ Davidson motorcycles .

Aside from Harley @-@ Davidson fans , the company itself had a more conflicted reaction to the successful Honda " You meet the nicest people " campaign . At first they were offended at the suggestion that Harley @-@ Davidson riders were not " nice people . " Harley @-@ Davidson had , since its founding in 1903 , scrupulously cultivated an image of staid respectability , and would not begin to tentatively embrace the " outlaw " demographic of their customer base for at least another ten years . In 1964 they denied any association with one @-@ percenter bikers , and so distanced themselves from the implications of Honda 's campaign . But they also " tried to have it both ways " , and soon joined Vespa and Yamaha in producing ads that were " suspiciously similar " to " You meet the nicest people . " Whether they were being offended by or imitating Honda , at the time Harley @-@ Davidson did not share the interpretation that Honda 's advertisements , " added to the macho Harley image . "

= = Model history = =

The Honda Super Cub debuted in 1958 , ten years after the establishment of Honda Motor Co . Ltd . The original 1952 Honda Cub F had been a clip @-@ on bicycle engine . Honda kept the name but added the prefix ' Super ' for the all @-@ new lightweight machine . The Super Cub sold poorly at first , owing mainly to the recession in Japan , and then 3 months after the 1958 launch , customer complaints began rolling in about slipping clutches . Honda salesmen and factory workers gave up holidays to repair the affected Super Cubs , visiting each customer in person . When it was imported to the US , the name was changed to Honda 50 , and later Honda Passport C70 , and C90 , because the Piper Super Cub airplane trademark had precedence . Similarly , in Britain they were only badged ' Honda 50 ' , ' Honda 90 ' etc. as the Triumph Tiger Cub preceded .

The Society of Automotive Engineers of Japan (Japanese) , included the 1958 Honda Super Cub C100 as one of their 240 Landmarks of Japanese Automotive Technology .

= = = Super Cub line = = =

The first Super Cub variation was the C102 , launched in April 1960 . The C102 had electric start in addition to kick starting , and battery & coil ignition instead of magneto , but was otherwise the same as the C100 .

The enlarged 86 @.@ 7 cc (5 @.@ 29 cu in) OHV engine of the 1963 C200 was used on the 1965 CM90 step @-@ through . New in 1965 was a 63 cc (3 @.@ 8 cu in) engine with a chain @-@ driven overhead camshaft (OHC) . This was used in two new models : the C65 , a step @-@ through with 4 @.@ 1 kW (5 @.@ 5 bhp) , and the S65 , with a frame like the C110 / C200 and 4 @.@ 6 kW (6 @.@ 2 bhp) @ 10 @,@ 000 rpm .

In 1966 the C50 appeared and remained in production through the mid 80s , becoming one of the

most widespread and familiar versions of the Super Cub . Honda replaced the C100 's 40 mm × 39 mm (1 1/2 in × 1 5/8 in) 50 cc OHV engine with the 39 mm × 41 mm (1 3/8 in × 1 5/8 in) OHC alloy head and iron cylinder engine from the CS50 and C65 , which increased power from 3 1/2 to 3 3/4 kW (4 1/2 to 4 3/4 bhp) . Similarly the CM90 was replaced in 1966 with the 89 cc (5 1/2 cu in) 5 1/2 kW (7 1/2 bhp) OHC CM91 , which a year later on 1967 , got restyled forks and headlamp like the C50 , to become the familiar C90 . Though the basic design of Cub remained unchanged , new styling and improvements included enclosed front forks . The C100 stayed in production alongside the newer versions one more year , until 1967 . After 1980 the USA C70 was called the C70 Passport .

In 1982 , for most markets , Honda fitted a new capacitor discharge ignition (CDI) system to replace the earlier contact points ignition , thereby helping to meet emission standards in markets such as the US . At the same time the electrical system was changed from 6 volt to 12 volt .

In 1984 , Honda released restyled versions of the Cubs on some markets , with square lamps and plastic covered handlebars and rear mudguard . On the domestic Japanese market the square style was optional , but in some places such as the UK they replaced imports of the traditionally styled round lamp Cub .

In 1986 , a larger 100 cc HA05E engine model was introduced especially for Asian markets . The newer 100 cc model was developed exclusively for Southeast Asian market , especially in Thailand , Malaysia and Vietnam , where underbones were very popular , with new features such as a telescopic front suspension to replace the older leading link suspension , and a four speed transmission to replace the older three speed transmission used in older Cub variants . The 100 cc model was initially known as the Honda Dream in Thailand and Honda EX5 in Malaysia , before being standardised as the Honda EX5 Dream in 2003 . In addition , Honda Japan began importing the made in Thailand Dream as the Super Cub C100EX in 1988 . The Japanese C100EX was later being facelifted in 1993 , while the Southeast Asian EX5 Dream retains the 1986 design until today with only minor cosmetic changes . On 2011 , the carbureted EX5 Dream was phased out in Thailand and being replaced with the fuel injected Honda Dream 110i , with the powertrain being derived from the fuel injected Honda Wave 110i .

In the late 1990s , Honda introduced their newer NF series motorcycles , known as Honda Wave series , called the Honda Innova in some markets , which use steel tube frames , front disc brake and plastic cover sets in various displacement options : 100 cc , 110 cc and 125 cc . Though not Cubs , these bikes sold consistently well particularly in European countries , where the production of Honda Cub models had been previously discontinued . However , the production of Honda Cubs in Asia , Africa and South America still continues today even though the newer Honda Wave Series and other designs have been introduced alongside the Cub .

In 2007 , Honda began installing their PGM FI fuel injection system for the Honda Cubs in the Japanese market for lower smog forming emission .

== Sports Cub ==

The C110 Sports Cub debuted in October 1960 . The C110 was more like a traditional motorcycle that the rider had to straddle , not a step through . It had a different frame , with the fuel tank in the on top of the frame and in front of the seat , and the frame 's steel tube spine ran horizontally from the head tube to the seat . It also had a bit more power , increased from 3 1/2 to 3 3/4 kW (4 1/2 to 5 bhp) @ 9,500 rpm . Sub variants of the Sports Cub were the C111 , absent the pillion seat , and C110D , also called C114 , which had a low exhaust pipe . Early versions of the Sport Cub had a 3 speed gearbox but later this was changed to 4 speed . The C102 stayed in production for six model years , through 1965 , and the C110 Sports Cub through 1966 .

In 1963 came an enlarged OHV engine of 86 cc (5 1/4 cu in) and 4 1/2 kW (6 1/2 bhp) . It was used first in the C200 , which had a frame like the C110 , with more upright handlebars .

The S65 's last year of production was 1967 , and the CD65 and CL65 took its place for only one year , 1968 . These had the higher revving 4 1/2 kW (6 1/2 bhp) 63 cc (3 3/4 cu

in) engine of the CS65 . Then the 4 @. @ 6 kW (6 @. @ 2 bhp) 71 @. @ 8 cc (4 @. @ 38 cu in) C70 replaced the C65 and CL65 in 1969 . It had the same peak horsepower , but at 9 @ , @ 000 rpm instead of 10 @ , @ 000 , and more torque , 0 @. @ 53 kg · m (5 @. @ 2 N · m ; 3 @. @ 8 lbf · ft) at 7 @ , @ 000 rpm instead of 0 @. @ 48 kg · m (4 @. @ 7 N · m ; 3 @. @ 5 lbf · ft) at 8 @ , @ 000 rpm . It was introduced in the USA , Canada and Asia at launch and in the UK in 1972 .

= = = Mini bikes = = =

In 1960 the CZ100 arrived , using the same engine in a much smaller frame with only 5 " wheels . First of the Honda Z series , the CZ100 was meant only as a short @-@ distance novelty or paddock bike , but instead found popularity in the monkey bike niche .

= = = Trail = = =

An on- and off @-@ road version of the Super Cub , what today would be classed as a dual @-@ sport motorcycle but called a trail bike at the time , the CA100T Trail 50 , came out in 1961 . Jack McCormack , the first national sales manager of American Honda Motor Company , said the Trail 50 , and even more so the later Honda CB77 , was the result of Honda 's willingness to listen to and respond customer demand . " When you talk about Japanese manufacturers , their strength (besides the quality of their equipment) was that they listened to the marketplace . People always suggest that it was about Japanese management , but , to be frank , I was never impressed with Japanese management . They did what no other motorcycle make did ? they listened . "

In 1960 , McCormack noticed that one Honda dealer in Boise , Idaho was selling more Honda 50s than the combined total of all six dealers in Los Angeles . He found out that the Idaho dealer , Herb Uhl , ? was selling the CA100s as a trail bike by adding knobby tires for off @-@ road traction and a " cheater sprocket , " that is , increasing the final drive ratio by using a larger rear sprocket with more teeth , which increased the effective torque of the rear wheel , trading off lower top speed as a result . Uhl said the advantages of light weight and the automatic clutch allowed unskilled riders to enjoy off @-@ road riding , in comparison to traditional big trail bikes that could be difficult to handle . McCormack shipped a version of Uhl 's customized CA100 to Japan and requested Honda put it into production , and by March 1961 the Trail 50 was available to US dealers . Cycle World praised the simple pleasure of trail riding on the new bike , and it was a US sales success .

= = Specifications = =

= = Current popularity = =

Sales for Super Cubs have increased in Japan with upgrades on the engine and the installation of fuel injection for Japanese domestic market models starting from 2007 , making it more powerful , more economical and cleaner . With respect to newer , plastic body underbone designs , such as the Wave , the original Cub remains popular .

Cycle World magazine 's Peter Egan and Steve Kimball entered a stock Honda C70 Passport in the 1981 Craig Vetter Fuel Economy Challenge , competing against specially designed high @-@ mileage two wheelers built by teams of engineering students , and an entry from American Honda . The course was a 65 @-@ mile (105 km) loop near San Luis Obispo that had to be completed in 1 hour and 40 minutes , give or take 10 minutes , meaning an average speed of 35 mph (56 km / h) . Kimball , riding the Passport , won the event through skillful and error @-@ free riding , with 198 miles per US gallon (1 @. @ 19 L / 100 km ; 238 mpg @-@ imp) .

In Vietnam , Super Cubs are the predominant model of motorcycle taxi , so that " Honda " has become a genericized trademark or metonymy , equivalent to " xe ôm " referring to any motorcycle taxi . In the English speaking world as well , " Honda " was often a synonym for " motorcycle " as a result of the ubiquity of the Super Cub .

The Super Cub was included in The Guggenheim 's 1998 The Art of the Motorcycle exhibition . In 2006 , on the Discovery Channel 's The Greatest Ever series , an episode on motorcycles placed the 1958 49 cc Super Cub in first place . James May , a co @-@ presenter on the popular television series Top Gear , bought a Honda Super Cub for the 2008 Season 12 Vietnam special . Author Roland Brown wrote that , " of all the brilliant bikes Honda have built ? the CB750 superbike , Mike Hailwood 's six @-@ cylinder racers , the mighty Gold Wing , you name them ? the most important of all is the C100 Super Cub of 1958 . "

In 2014 , the Super Cub became the first vehicle in Japan to be granted a three @-@ dimensional trademark .

= = = Licensed models = = =

Chongqing Guangyu Motorcycle Manufacture Co , of China , known as Kamax , has a line of motorcycles based on the Super Cub Design , licensed from Honda , including the EEC Super Cub . This Super Cub ' remake ' was developed solely for the European market in cooperation with Super Motor Company . Super Motor Company which is the sole European distributor of the EEC Super Cub sells 3 different variations ; the Super 25 , the Super 50 and the Super 100 . Flyscooters imported a Yinxiang Super Cub variant to the US , under the name Fly Scout . Similarly , China Jialing Industrial Co . , Ltd. has ten models based on Honda 's Super Cub design , including the JL50Q @-@ 2 and JL90 @-@ 1 which are faithful to the original 1958 styling , as well as several more modern restylings . Lifan Group exports a version to the UK , the 97 cc (5 @. @ 9 cu in) LF100 , which features telescopic forks , a four speed gearbox and a digital gear indicator .

SYM Motors of Taiwan licensed the Super Cub design as the Symba 100 , previously called the Symba 110 , which they exported to the US . While keeping the basic design , SYM increased the size of the front brake from 110 to 130 mm (4 @. @ 3 to 5 @. @ 1 in) , and added an LED fuel gauge . Instead of leading link front forks , it uses telescopic forks . The Symba engine has a carbureted 101 @. @ 4 cc (6 @. @ 19 cu in) single claimed to produce 6 @. @ 5 hp (4 @. @ 8 kW) at 8500 rpm , with a four speed gearbox using a centrifugal clutch semi @-@ automatic transmission .

= = = EV @-@ Cub = = =

At the 2009 Tokyo Motor Show , Honda presented the EV @-@ Cub concept vehicle , an electric motorcycle patterned after the venerable Super Cub , featuring two @-@ wheel drive by means of electric motors mounted in the hubs of each of the wheels . Honda said they felt keeping the 1958 layout for their 21st century concept bike made sense because , " the human body has not changed in the past 50 years , " and , " the size , shape and position of all the Super Cub parts had a kind of necessity to them , and that the design of the Super Cub was very rational and rider @-@ centric . " The additional space created by the absence of the engine in the center of the frame and the lack of a gas tank created room for underseat helmet storage , typical of a scooter . Integrated with the new electric motorcycle was an interactive communications system , to let riders converse while riding . Several other companies , including Christini , KTM , Öhlins , and Yamaha have done development on two @-@ wheel drive motorcycles , and have found that the addition of power to the front as well as the rear wheel aids in stability , particularly in corners and in the hands of novice riders . At the time Honda hinted that they would bring the EV @-@ Cub to market in 2010 .