

= Maserati MC12 =

The Maserati MC12 is a limited production two @-@ seater sports car produced by Italian car maker Maserati to allow a racing variant to compete in the FIA GT Championship . The car entered production in 2004 , with 25 cars produced . A further 25 were produced in 2005 , making a total of 50 cars available for customers , each of which was pre @-@ sold for ? 600 @, @ 000 .

Maserati designed and built the car on the chassis of the Enzo Ferrari , but the final car is much larger and has a lower drag coefficient . The MC12 is longer , wider and taller and has a sharper nose and smoother curves than the Enzo Ferrari , which has faster acceleration , better braking performance (shorter braking distance) and a higher top speed . The top speed of the Maserati MC12 is 330 kilometres per hour (205 mph) whereas the top speed of the Enzo Ferrari is 350 kilometres per hour (217 @. @ 5 mph) .

The MC12 was developed to signal Maserati 's return to racing after 37 years . The road version was produced to homologate the race version . One requirement for participation in the FIA GT is the production of at least 25 road cars . Three GT1 race cars were entered into the FIA GT with great success . Maserati began racing the MC12 in the FIA GT toward the end of the 2004 season , winning the race held at the Zhuhai International Circuit . The racing MC12s were entered into the American Le Mans Series races in 2005 but exceeded the size restrictions and consequently paid weight penalties due to excess range .

= = Development = =

Under the direction of Giorgio Ascanelli , Maserati began development of an FIA GT @-@ eligible race car . This car , which would eventually be named the MC12 , was initially called the " MCC " (" Maserati Corse Competizione ") and it was to be developed simultaneously with a road @-@ going version , the " MCS " (" Maserati Corse Stradale ") . Frank Stephenson did the majority of the body styling , but the initial shape was developed during wind tunnel testing from an idea had by Giorgetto Giugiaro . The MCC has a very similar body shape to the MC12 , but there are several key differences , most notably the rear spoiler . Andrea Bertolini served as the chief test driver throughout development , although some testing was done by Michael Schumacher , who frequently tested the MCC at the Fiorano Circuit . During the development process , the MCC name was set aside after Maserati established the car 's official name , MC12 .

The car is based heavily on the Enzo Ferrari , using a slightly modified version of the Ferrari Dino V12 , the same gearbox (but given the unique name of " Maserati Cambiocorsa ") and the same chassis and track (length of axle between the wheels) . The windshield is the only externally visible component shared with the Enzo ; the MC12 has a unique body which is wider , longer and slightly taller . The increased size creates greater downforce across the MC12 's body in addition to the downforce created by the two @-@ metre spoiler .

= = Overview = =

The MC12 is a two @-@ door coupe with a targa top roof , although the detached roof cannot be stored in the car . The mid @-@ rear layout (engine between the axles but behind the cabin) keeps the centre of gravity in the middle of the car , which increases stability and improves the car 's cornering ability . The standing weight distribution is 41 % front and 59 % rear . At speed , however , the downforce provided by the rear spoiler affects this to the extent that at 200 kilometres per hour (125 mph) the downforce is 34 % front and 66 % rear .

= = = Interior = = =

Even though the car is designed as a homologation vehicle and is a modification of a racing car , the interior is intended to be luxurious . The interior is a mix of gel @-@ coated carbon fibre , blue leather and silver " Brightex " , a synthetic material which was found to be " too expensive for the

fashion industry ". The centre console features the characteristic Maserati oval analogue clock and a blue ignition button , but it has been criticised for lacking a radio , car stereo or a place to install an aftermarket sound system .

=== Exterior ===

The body of the car , made entirely of carbon fibre , underwent extensive wind tunnel testing to achieve maximum downforce across all surfaces . As a result , the rear spoiler is two metres (79 in) wide but only 30 millimetres (1 @. @ 2 in) thick , the underside of the car is smooth , and the rear bumper has diffusers to take advantage of ground effect . Air is sucked into the engine compartment through the air scoop ; its positioning on top of the cabin makes the car taller than the Enzo . The exterior is available only in the white @-@ and @-@ blue colour scheme , a tribute to the America Camoradi racing team that drove the Maserati Tipo Birdcages in the early 1960s . The car is noted for the awkwardness that results from its size ; very long and wider than a Hummer H2 . This , combined with the lack of a rear window , can make parking the MC12 challenging .

=== Engine ===

The MC12 sports a 232 @-@ kilogram (511 lb) , 5 @, @ 998 cc (366 cu in) Enzo Ferrari @-@ derived V12 engine , mounted at 65 ° . Each cylinder has four valves , lubricated via a dry sump system , and a compression ratio of 11 @. @ 2 : 1 . These combine to provide a maximum torque of 652 newton metres (481 lbf · ft) at 5500 rpm and a maximum power of 630 PS (460 kW ; 620 hp) at 7500 rpm . The redline rpm is indicated at 7500 ? despite being safe up to 7700 ? whereas the Enzo has its redline at 8200 rpm .

The Maserati MC12 can accelerate from 0 to 100 kilometres per hour (62 mph) in 3 @. @ 8 seconds (though Motor Trend Magazine managed 3 @. @ 7 seconds) and on to 200 kilometres per hour (125 mph) in 9 @. @ 9 seconds . It can complete a standing (from stationary) quarter mile in 11 @. @ 3 seconds with a terminal speed of 200 kilometres per hour (125 mph) or a standing kilometre in 20 @. @ 1 seconds . The maximum speed of the Maserati MC12 is 330 kilometres per hour (205 mph) .

Power is fed to the wheels through a rear @-@ mounted , six @-@ speed semi @-@ automatic transmission . The gearbox is the same as the Enzo 's transmission (tuned to different gear ratios) but renamed " Maserati Cambiocorsa " . It provides a shift time of just 150 milliseconds , and is mechanical with a 215 @-@ millimetre (8 @. @ 5 in) twin @-@ plate dry clutch .

=== Chassis ===

The MC12 's chassis is a monocoque made of carbon and nomex , with an aluminium sub @-@ chassis at the front and rear . It has a roll bar to provide additional strength , comfort and safety . Double wishbone suspension with push @-@ rod @-@ operated coil springs provide stability and dampers smooth the ride for the passengers . The front of the car can be raised for speed bumps and hills by pressing a button that extends the front suspension . There are two modes for the chassis ' tuning which can also be changed with a button in the cabin : " sport " , the standard setting , and " race " , which features less of the " Bosch ASR " (anti @-@ slip regulation) traction control , faster shifts and stiffer suspension .

=== Wheels ===

The MC12 has 480 @-@ millimetre (19 in) wheels with a width of 230 millimetres (9 in) at the front and 330 millimetres (13 in) at the rear . The tyres are " Pirelli P Zero Corsas " with codes of 245 / 35 ZR 19 for the front tyres and 345 / 35 ZR 19 for the rear . The brakes are Brembo disc brakes with a Bosch anti @-@ lock braking system (ABS) . The front brakes have a diameter of 380 millimetres (15 in) with six @-@ piston calipers and the rear brakes have a diameter of 335

millimetres (13 @. @ 2 in) with four @-@ piston calipers . The centre @-@ lock wheel nuts that hold the wheels to the chassis are colour @-@ coded ; red on the left of the car , blue on the right .

= = Reception = =

The car has generally received mixed reviews , with critics saying it is hard to drive , overpriced and too large . Other criticisms include the lack of a trunk , rear window , spare tire and radio , and the way the car 's engine was limited or " drugged " . Current driver for Vitaphone Racing Team , Andrea Bertolini , the chief test driver throughout the development , said the car , " reacts well and is very reliable in its reactions . "

The Top Gear television series acquired an MC12 , and test driver The Stig achieved a lap time of 1 : 18 @. @ 9 around the Top Gear track ? 0 @. @ 1 seconds faster than his lap in the Enzo Ferrari . Host Jeremy Clarkson also drove it , comparing it to the Maserati Biturbo , a car he disliked . Clarkson criticised the car greatly , pointing out that , unlike the Enzo , it lacks a rear window . He also commented that it is " difficult " due to its size , and , " one of the twitchiest cars " , he has ever driven , meaning a small action by the driver results in an exaggerated reaction from the car . For these reasons , he promptly renamed the car " The MC Hammer " . Regarding the design of a racing car and modification to road standards he said , " is it a racer ? Is it a GT car ? Is it a de @-@ tuned Enzo in a fat suit ? You can 't really tell . " Despite his criticisms he did compliment the smooth ride :

This car glides over bumps , the suspension absorbing the roadworker Johnnies ' laziness without transferring a single ripple to the cool blue interior with its Milanese fashion house upholstery .

Motor Trend Magazine reviewer Frank Markus had a more positive opinion . Despite initial skepticism he said , " It turns out that the Enzo makes a more comfortable and attractive road car when made over as a butch Maserati racer in street couture " . Markus complimented the stability of braking and the handling ability of the MC12 , especially the drifting allowed by the traction control when cornering , commenting that " There 's none of the knife @-@ edged limit handling we criticised in the more extreme Enzo . It 's even more forgiving at the limit than an Acura NSX . "

When Automobile Magazine tested an MC12 , reviewer Preston Lerner called it " user @-@ friendly " , praising the responsiveness and simplicity of driving . Lerner approved of Frank Stephenson 's work with the styling of both the car 's exterior and interior , calling the trim " Speed @-@ Racer @-@ ish " but " without looking as though it belongs in a Nitrous @-@ ized Civic " . He also complimented the ASR 's level of intervention , commenting that it " lets the fun factor get reasonably high before kicking in " .

In 2008 Evo Magazine ran the MC12 at Nordschleife and obtained a 7 : 24 @. @ 29 @-@ second lap time . This was also the second time an MC12 recorded a faster lap time than its Ferrari counterpart , with the Enzo lapping the track 1 second slower .

= = Racing = =

= = = FIA GT = = =

In 2004 Maserati completed three MC12 GT1 race cars intended for the FIA GT GT1 class . The AF Corse factory @-@ backed squad debuted the race at Imola , yet the FIA did not allow the MC12 to score points due to its debated homologation . Even with this setback , the team managed to take second and third places . At the next round at Oschersleben , the MC12 of Andrea Bertolini and Mika Salo won for the first time . At the final round of the year at Zhuhai , the FIA finally agreed to homologate the MC12s and allow them to score points towards the championship . With this , the MC12 again took victory , allowing it to score enough points to finish 7th in the teams championship .

In 2005 Maserati won the FIA GT Manufacturers Cup with 239 points : almost double the score of next team (Ferrari with 125 points) . The two teams that entered MC12s into the FIA GT , Vitaphone Racing and JMB Racing , finished first and second respectively in the Team Cup , with

Vitaphone winning by a considerable margin . Four of the MC12 drivers were in the running to win the FIA GT Drivers ' Title at the Bahrain International Circuit at the start of the final race of 2005 : Karl Wendlinger and Andrea Bertolini each on 71 points and Timo Scheider and Michael Bartels on 70 . Gabriele Gardel of Ferrari was also on 70 points , however , and in the crucial race he placed ahead of all of the Maseratis , driving an older Ferrari 550 Maranello . Gardel took the title , leaving all of the Maserati drivers within four points of first place (Scheider and Wendlinger receiving four points for the race) .

In 2006 the only team representing Maserati was Vitaphone Racing . On September 30 , 2006 , Vitaphone secured the Teams ' Championship for the 2006 season despite their drivers placing 5th and 7th in the Budapest 500 km race with weight penalties of 85 kilograms and 105 kilograms respectively . Bertolini and Bartels also shared first place in the Drivers ' Championship on 71 points but the manufacturers cup went to Aston Martin .

Vitaphone Racing again won the GT1 Teams ' Championship in the 2007 season on 115 points , followed by fellow MC12 team Scuderia Playteam Sarafree on 63 points . JMB Racing also entered two MC12s , but they were used by amateur drivers competing in the Citation Cup , which was won by JMB 's driver Ben Aucott . Maserati also won the Manufacturers ' Cup by a significant margin while Thomas Biagi won the Drivers ' Championship . Fellow Vitaphone drivers Miguel Ramos and Christian Montanari tied for sixth , while Playteam 's Andrea Bertolini and Andrea Piccini were just behind .

For 2008 , Vitaphone Racing returned with a pair of MC12s for drivers Andrea Bertolini , Michael Bartels , and Miguel Ramos , as well as newcomer Alexandre Negrão . The season ended with another Teams ' Championship for Vitaphone Racing (122 @. @ 5 points) and Drivers ' Championship for Bertolini and Bartels . In the ninth round , the team fielded a third car under the name of Team Vitasystem , driven by Pedro Lamy and Matteo Bobbi which scored one point . JMB Racing retained a single MC12 for 2007 Citation Cup winner Ben Aucott and drivers Peter Kutemann and Alain Ferté , competing in the first five events of the championship .

In the 2009 season the Vitaphone Racing won the fifth consecutive Team Championship , while Bertolini and Bartels gained their third Drivers ' Championship . The other two drivers were Miguel Ramos and Alex Müller , who ended in sixth position . Starting from the fourth round , the team entered a third car under the name of Vitaphone Racing Team DHL , driven by Matteo Bobbi and Alessandro Pier Guidi , achieving good results : despite being only a one @- @ car team , with a partial season involvement , they ended the Teams ' Championship in fourth position (32 points) , scoring a victory in the last round .

= = = FIA GT1 World Championship = = =

With the inauguration of the FIA GT1 World Championship in 2010 , Maserati continued their commitment to the series with two teams entering . Vitaphone Racing Team , the defending FIA GT Champions , won five races en route to the Drivers ' and Teams ' World Championships , but Maserati lost to Aston Martin in the Manufacturers ' Trophy . The second team representing Maserati was Alfrid Heger 's Triple H Team Hegersport .

= = = Italian GT = = =

MC12s have had great success racing in Italy , and have replaced the GT3 " Maserati Trofeo Light " as Maserati 's representative in the Italian GT Championship . In 2005 Maserati introduced two MC12s to the GT1 division under Scuderia Playteam and Racing Box , with the teams placing first and third overall respectively . The cars were re @- @ entered in 2006 , with Scuderia Playteam again securing overall victory and Racing Box coming second . From 2007 , GT1 cars are not permitted in the championship , and Scuderia Playteam moved to the FIA GT Championship .

Racing Box also participated in the non @- @ championship 6 Hours of Vallelunga twice , winning in 2005 with Michele Rugolo , Leonardo Maddelena , and Davide Mastracci , then again in 2006 with Pedro Lamy , Marco Cioci , and Piergiuseppe Perazzini .

== Super GT ==

In 2006 , the Le Mans winning outfit Team Goh was intending to race a Maserati MC12 in the Super GT series in Japan . However , the team was forced to withdraw because of driver problems (Jan Magnussen falling ill suddenly and returning to Denmark) and disappointing lap times at the Suzuka Circuit during testing . While the car was faster than its Super GT rivals down the straights , it was losing more than a second per lap in the corners due to its poorer aerodynamics .

== American Le Mans Series ==

In 2004 the Maserati MC12s were unable to compete in series backed by the ACO , such as the Le Mans Endurance Series (LMES) in Europe and the American Le Mans Series (ALMS) because they exceeded both the length and width restrictions for their class . The car 's nose was shortened by 200 millimetres (7 @. @ 9 in) to attempt to comply with regulations , but was still 66 millimetres (2 @. @ 6 in) too wide . In 2005 the governing body of the ALMS , the International Motor Sports Association (IMSA) , allowed the MC12s to compete as a guest with the agreement that they were not allowed to score championship points and were forced to run a weight penalty . Some ALMS teams initially objected to the participation of the MC12 due to the possibility that an accident could eliminate their chances at the 24 Hours of Le Mans , but the MC12 was finally allowed to race . The ACO stood by their ruling on the car by forbidding it from entering other Le Mans series .

The lone MC12 would be campaigned under the Maserati Corse banner , but run by the American Risi Competizione team . The 2005 American Le Mans Series season was not as successful for the team , with the team scoring no wins . In the final race at Mazda Raceway Laguna Seca , the MC12 was clipped by a competitor , causing damage that resulted in a lengthy pit stop . After resuming the race , a loss of traction caused by cold tires made the car hit a curb , which broke the radiator and took the MC12 out of the race .

In August 2007 , Fredy Lienhard and Didier Theys announced their preparation of a former FIA GT MC12 for use in the American Le Mans Series . The car made its debut at Road America , finishing 3rd in the GT1 class after qualifying competitively . The only other race entered was Round 11 at Road Atlanta for the Petit Le Mans where the team failed to finish following an accident , but were still classified second in class . Doran 's Maserati however had qualified on the class pole . The team selected Michelin tires instead of the Pirellis originally used by Maserati Corse in 2005 , and was also allowed to race with a full @-@ width rear wing instead of the smaller wing used by Maserati Corse and teams in FIA GT , although the wing was not as tall . IMSA also allowed Doran to score points in the American Le Mans Series championships .

== MC12 Versione Corse ==

The Corse is a variant of the MC12 intended for racetrack use . In contrast to the race version of the MC12 , of which street @-@ legal versions were produced for homologation purposes , the MC12 Corse is intended for private use , albeit restricted to the track , as the Corse 's modifications make it illegal to drive on the road .

The Corse was developed directly from the MC12 GT1 , which won the 2005 FIA GT Manufacturers Cup . The car was released in mid @-@ 2006 , " in response to the customer demand to own the MC12 racing car and fueled by the growth in track days , where owners can drive their cars at high speeds in the safety of a race track " , as stated by Edward Butler , General Manager for Maserati in Australia and New Zealand . In similar fashion to the Ferrari FXX , although the owners are private individuals , Maserati is responsible for the storage , upkeep , and maintenance of the cars , and they are only driven on specially organized track days . Unlike the FXX , Corsas are not used for research and development , and are used only for entertainment . A single MC12 Corsa has been modified by its owner to make it street @-@ legal .

Only twelve MC12 Corsas were sold to selected customers , each of whom paid ? 1 million (US \$ 1

@. @ 47 million) for the privilege . Another three vehicles were produced for testing and publicity purposes . The Corsa shares its engine with the MC12 GT1 ; the powerplant produces 755 PS (555 kW ; 745 hp) at 8000 rpm , 122 PS (90 kW ; 120 hp) more than the original MC12 . The MC12 Corse shares the GT1 's shortened nose , which was a requirement for entry into the American Le Mans Series . The car was available in a single standard color , named " Blue Victory " , though the car 's paint could be customized upon request . The MC12 Corse possesses steel / carbon racing brakes , but is not fitted with an anti @-@ lock braking system .

= = Birdcage 75th = =

The Birdcage 75th is a concept car created by automobile manufacturer Maserati and designed by Pininfarina . It was first introduced at the 2005 Geneva Auto Show . It draws inspiration from the Maserati Tipo 61 Birdcage of the 1960s and was made as a celebration of Pininfarina 's 75th anniversary . It was said that Maserati originally planned to produce this car under the name Maserati MC13 in 2008 , but due to problems with Pininfarina , the plans were never carried out .