

Driving fun in a new dimension: The MINI Rocketman Concept.



The creation of innovative concepts for urban mobility has seen MINI grow into the successful brand we know today. A constant stream of new ideas from its beginnings more than 50 years ago to the present day have ensured that driving fun has continued to grow even though space on our roads has become ever tighter. Underpinning this success has been the creative use of space, a principle that enters new territory with the MINI Rocketman Concept. The study car, which will be revealed to the public worldwide for the first time at the International Geneva Motor Show (3 – 13 March 2011), harks back to the classic Mini in terms of its exterior dimensions, while its technology points to the future of automotive design. A 3+1-seater with 3 doors and a length of just over 3 metres (approx. 10 ft.), the MINI Rocketman Concept responds to the fundamental requirements of mobile lifestyles in the big cities of the future by pooling the brand's core values in concentrated form. Ingenious functionality, smile-inducing agility, exceptional efficiency and irresistible design come together into an extraordinarily attractive and groundbreaking, yet typically MINI, subcompact car concept for the premium segment.

Displaying both an awareness of tradition and talent for innovation, the MINI design team developed the vision of a car that takes up impressively little space on the road but boasts an enviably spacious interior. The MINI Rocketman Concept therefore carries over the classic virtues of the brand into a pathbreaking vehicle concept. It offers a fresh interpretation of unmistakable MINI design features, and uses cutting-edge construction and manufacturing technology to create unique solutions in body and interior design.

The innovative character of the study is defined by the systematic application of lightweight design principles and a pure-bred interior geared to maximum driving fun and unbeatable variability. A carbon spaceframe construction, whose striking surface structure is visible at the front end of the car, around its doors and in the interior, forms the basis for a weight-minimising construction. Indeed, the MINI Rocketman Concept offers the ideal platform for achieving outstanding efficiency. To this end, it is designed to allow the integration of a

drive system which combines further enhanced sprinting ability with average fuel consumption of just three litres per 100 kilometres (94 mpg imp).

Wide-opening doors with double-hinge joints and integrated sills facilitate entry into the MINI Rocketman Concept. The lightweight seats are contoured in customary MINI style and can be arranged in a variety of different positions. This allows owners to choose between maximum driving fun two-up, a comfortable amount of room for three occupants, or even an exceptionally efficient division of space accommodating four seats.

The capacity of the luggage compartment can be adapted to passenger requirements just as flexibly. The two-part tailgate consists of one section which is attached to the roof and opens extremely high, and a lower section which extends out of the body in the form of a drawer.

The operating logic of the MINI Rocketman Concept is also geared to the multi-layered demands of a contemporary target group, whose mobility needs are shaped by their desire for driving fun, flexible usage possibilities and extensive connectivity with their lives outside the car. The central control unit can be taken out of the car and configured on a computer before the journey begins to update navigation destinations, the music playlist or contact details for mobile communications.

Body design: hallmark MINI design language in particularly concentrated form.

The MINI Rocketman Concept body is shaped by an avant-garde interpretation of time-honoured brand features. Innovative construction techniques allow the principle used in the classic Mini – of providing the maximum amount of room on the smallest possible footprint – to be carried over to the mobility challenges of urban areas in the 21st century. The MINI Rocketman Concept measures 3.419 metres (approx. 11 ft. 3 in.) in length, adding just a few extra centimetres to the front and rear of the brand's founding father born in 1959. The new study is 1.907 metres (approx. 6 ft. 3 in.) wide, including the exterior mirrors, and stands 1.398 metres (approx. 4 ft. 7 in) tall. Its proportions also display clear symmetries with both the classic Mini and the brand's present-day line-up. The brand's familiar appearance is therefore concentrated into a new set of dimensions, with the concept for a new vehicle segment remaining unmistakably recognisable as a MINI.

The interpretation of the characteristic MINI design language chosen for the study car also exudes a powerful and dynamic allure. Tightly contoured surfaces, large wheels and a basic form dictated by straight lines help give the MINI Rocketman Concept a resoundingly solid structure. In addition to its tell-tale proportions, a sprinkling of distinctive design features ensure that its brand affiliation is immediately clear. Large, circular headlights and a radiator grille with chrome surround dominate the front end. While the exterior contours of the headlights fit the familiar visual template, their inner structure has been further developed for the new study. The centrally positioned LED units generating full beam are bordered by an eye-catching light ring for dipped-beam mode. Direction indicators integrated into the headlight units are a feature shared with the current range of series-produced MINI models.

The dimensions of the headlights reflect those of the current MINI, which means they come across as particularly large when set against the smaller face of the study car. As stand-out features of MINI design they symbolise the core values of the brand, which remain reassuringly intact in the new vehicle concept represented by the study.

In the area surrounding the headlights and around the front apron and radiator grille, sections of the carbon spaceframe are visible alongside the painted and chromed surfaces. Its striking surface structure serves as a reminder of the study's innovative construction blueprint.

Powerful silhouette, innovative door concept.

Large wheels and the three-level structural split of body, "wraparound" greenhouse and roof resting on top give the flanks the same appearance as the MINI models already in series production. The windows taper as they extend back towards the rear, emphasising the body's dynamic wedge shape and offering an immediate hint of the vehicle's sporty and agile character. The high waistline, accentuated on the MINI by a chrome frame ringing the vehicle, takes the form of a light strip on the MINI Rocketman Concept and throws the study's powerful silhouette into even sharper focus.

The study's 18-inch wheels likewise leave no doubt that the sure-footed road-holding and sporty handling properties of a MINI can also play a key role in a car with smaller dimensions. The weight-saving wheels specially developed for the MINI Rocketman Concept have an aerodynamically highly effective, en-

closed surface structure. And the carbon wing contour of the directional wheels also helps to reduce drag. An aluminium trim strip on the wheel rim adds an attractive stylistic touch.

Among the car's key design and functionality-related innovations are the two side doors. Their length and the specially designed arrangement of the door sills allow extremely comfortable access to all the seats in the MINI Rocketman Concept. When opened, the doors pivot outwards complete with their sills, enabling the driver and front passenger to climb in right next to their seats and get settled in comfort. Entry to the rear seats is also made much easier by the car's unusual door concept. The carbon spaceframe construction, together with the impressively high torsional stiffness of the underbody structure, allows the arrangement of the side sills to be combined with extremely high body rigidity.

In addition, an extremely sophisticated opening mechanism ensures easy access into the car, even in tight parking spaces. The front-hinged doors have a double-hinge joint, which also allows a large opening angle when space is restricted. The innovative character of this construction element is also evident when the doors are closed, the carbon hinges standing out visibly in form and colour from the rest of the body. The MINI Rocketman Concept thus takes a stylistic cue from the classic Mini, whose exterior-mounted door hinges also went on to become an identifying characteristic.

Projector-style rear lights, transparent and illuminated glass for the roof.

The rear lights of the MINI Rocketman Concept have a trapezoidal stirrup design – into which all the light functions are integrated – and work using projector technology. The lamp assembly projects the rear and braking light and the light for the direction indicators onto the car body. The high-output LED units used for the lights ensure that even this indirect illumination concept produces the accustomed intensity of light that is necessary for safety.

The roof of the MINI Rocketman Concept also puts on an extraordinary light show. The full-surface glass roof is segmented by illuminated braces to recreate the look of Britain's Union Jack flag. When not illuminated, the longitudinal, horizontal and diagonal braces glow a bright Porcelain White. In darkness the integrated optical fibres give the interior of the MINI Rocketman Concept a

pleasantly indirect illumination and, as a result, a more effective nocturnal appearance.

The bright colour of the roof and mirror caps – likewise painted Porcelain White – create an attractive contrast to the Bermuda (a warm shade of grey) of the body. The areas of carbon visible at the front end and around the doors add further striking touches.

Split tailgate with drawer and integrated rear cargo carrier.

The MINI Rocketman Concept also uses creative design and innovative technical solutions to open up new layout options for the luggage area. This enhances the versatility of the existing space and means it can be used more efficiently. The split two-part tailgate consists of one section which is attached to the roof and opens extremely high and a lower section which extends out 350 millimetres from the body in the form of a drawer unit. The drawer represents the further development of the downward-opening tailgate seen on the classic Mini. This construction principle allows room to be made for pieces of luggage and travel items even when the car is carrying four occupants. The MINI Rocketman Concept literally grows as a vehicle when it's time to start loading up the gear.

An intelligent folding mechanism makes it possible to lock the cargo drawer of the MINI Rocketman Concept either higher up or further in towards the passenger compartment, as the loading scenario demands. This allows loads to be transported out of sight and protected from the weather. If required, items can also be loaded through into the passenger compartment. In addition, the open-top cargo drawer can also serve as a rear luggage carrier. Here, purpose-built inserts make it easier to transport snowboards and other bulky items of sports equipment. Added to which, the glass tailgate, which extends well into the roof, helps to enhance loading flexibility. It is connected with the body via a centrally positioned hinge with integrated gas strut system, which also allows it to be opened when the rear carrier is loaded with gear.

Seat concept: the ideal position for every mobility requirement.

The arrangement of the seats and control elements in the passenger compartment of the MINI Rocketman Concept ensures maximum versatility for the widest possible range of mobility needs. The low-weight seats, which are traditional MINI in form, offer a high level of comfort and optimum lateral support

even for sporty drivers. The amount of space for the driver and passengers can be varied as required. Three individual seats slide fore and aft, allowing a high level of comfort with generous head, leg and shoulder room. There is also an additional seat in the rear, whose backrest can be folded down fully to serve as a stowage surface.

Three mobility scenarios have been developed to define the real-life usage possibilities offered by the interior of the study. In a layout designed specially to enhance a sporting driving experience, the MINI Rocketman Concept offers just the right amount of space for the driver and front passenger. The front seats are pushed back as far as possible and the instrument cluster also slides fore and aft to provide the ideal position for a full-blooded driving experience.

If an additional passenger joins the two already on board, the front passenger can move his seat forward again to take a position slightly further forward than the driver. In this configuration, the front passenger's legroom is reduced to standard MINI levels to accommodate an equally generously sized rear seat behind him. The MINI Rocketman Concept also offers a practical solution for travelling with four people. Once the driver has returned both his seat and the instrument cluster to the standard position, a second rear seat allows a fourth person to climb aboard for shorter journeys, at least.

Innovative mix of materials, hallmark MINI design.

The impressive variability of the interior is complemented by a pure-bred design which spotlights both the unmistakable style of the brand and the study car's pioneering technology. The intention behind the selection of materials and interior trim structure was to create a feeling of contemporary functionality and lightness. To this end, the carbon structure of the body frame has been left exposed in the footwells and around the centre console.

A fresh interpretation of customary MINI design features emphasises the further development of the brand's characteristic design language inside the study car as well. The door panels house the door pulls and the stowage compartments, which feature trim elements whose elliptical form reaches past the B-pillar into the rear compartment. The surface design therefore offers a stylistic nod to the variable division of space and shared driving experience provided by the MINI Rocketman Concept interior.

Inside the car, leather covers and high-gloss painted surfaces combine with armrests and trim strips made from a special paper that has been pressed and folded into the desired structure. The trim strips are backlit by LED-powered fibre optics. Plus, a light strip that wraps around the interior at waistline height generates a particularly harmonious ambience.

Innovative operating concept: trackball on the steering wheel, 3D-effect graphics in the Centre Speedo.

An operating concept developed for the MINI Rocketman Concept brings together principles from the MINI design handbook, innovative new functions and a pioneering operating system to serve up even greater driving fun over both short and long journeys. A cockpit instrument, positioned above the steering wheel and therefore directly in the driver's field of view, houses the rev counter and on-board computer display. The large-format Centre Speedo with peripheral speedometer and multifunctional colour display also adheres to the system logic familiar from the current range of series-produced MINI cars as far as display arrangement is concerned. The development of the rigorously applied display/control element separation principle, meanwhile, has been taken to the next level.

In addition to multifunction buttons on the steering wheel, the current MINI also has a joystick on the centre console for operating vehicle-related, navigation, entertainment and communications functions. By contrast, the MINI Rocketman Concept concentrates all the control elements on the steering wheel. This reflects an ongoing commitment to the concept of simple and intuitive operation, and means that the driver can operate more functions than ever while keeping both hands on the steering wheel at all times.

A press of the thumb on the relevant multifunction buttons on the left-hand steering wheel spoke is all that is required to use front-line controls such as the volume for the audio system and the call pick-up function for incoming telephone calls. In addition, a trackball is integrated into the right-hand steering wheel spoke. Inspired by computer operating, this element allows the driver to control an impressively wide range of processes. For example, to navigate through the menu levels the driver turns the trackball horizontally, while vertical movements allow him to scroll up and down lists. The driver then selects the desired function with a press of the trackball. With selected functions such as

in-car internet, the driver uses his thumb to move the cursor around the display in any direction.

The graphics in the colour display of the Centre Speedo are more diverse, higher quality and sharper than ever. High-resolution 3-D graphics open up new possibilities in the need-based selection of functions using the trackball and display. According on the driver's preference and the driving situation, particularly relevant displays and alerts are moved into the foreground, while the remaining status displays remain visible on a display level further back. This makes it significantly easier to move quickly and intuitively between the navigation map display, music programme selection and telephone contacts list.

Flawless connectivity and new ways of personalising the car configuration.

The navigation, communications and entertainment systems in the MINI Rocketman Concept represent the consistent further development of the functions already available through MINI Connected in current series-produced MINI cars. Intelligent connectivity turns the car into a mobile element of the driver's personal lifestyle. Internet-based services for communications, integrated navigation and an almost limitlessly expandable entertainment programme play a key role in maximising driving fun, comfort and safety. With the control elements developed for the MINI Rocketman Concept, personalised usage of these functions reaches a new level. The removable control unit (for comfort and connectivity functions) integrated into the Centre Speedo can be configured on a computer before the start of a journey, enabling the driver to transfer new music files, a navigation destination and contact details for mobile communications and internet usage into the vehicle with maximum convenience.

These innovative control systems allow driving fun in a MINI to become an integrated component of the driver's personal lifestyle more than ever. Indeed, information, images, data, contacts and media can be made available in digital form for mobile usage anywhere – at home, at the workplace or while on the move. Known as the MINI Rocketman Concept, the mobile control unit stores telephone numbers and email contacts, as well as navigation data, internet addresses and full websites or messages from online social networks, music files, photos and videos. This provides a direct route into the MINI for additional

sources of driving fun in the shape of new destinations, important contacts, up-to-date information, exciting sounds and powerful images. In the opposite direction, this extended connectivity can also enrich everyday life outside the car; for example, new contact details from telephone calls or online connections can also be made available outside the car via the MINI Rocketman Concept.

MINI Rocketman Concept: compact dimensions, new format, the usual driving fun.

The MINI Rocketman Concept once again brings the traditional principles of the classic Mini onto the road through the introduction of innovative ideas. The creativity of the MINI design team enables them to transfer fundamental MINI features and values into a groundbreaking new vehicle concept in untarnished form. As a vision of the urban mobility of tomorrow, the MINI Rocketman Concept captures the imagination with its unflappable charisma, surprising variability, and lifestyle-oriented functionality, and provides the ideal platform for agile and efficient driving characteristics.

While the study showcases a new format, MINI still remains true to its bloodline. More than 50 years ago the brand's first car triggered a revolution in the small car segment. The classic Mini met the needs of urban mobility more comprehensively than any other vehicle before it, while at the same time offering the driving fun and individual style that sealed its legendary status. Today MINI continues to fulfil – in its own unique way – the desires of demanding target groups with a sense for the creative use of space, inspiring handling and premium quality. The MINI Rocketman Concept offers a glimpse of how these features may look in the future. Using innovative technology and creative solutions, the study reflects the brand's unsurpassed expertise in the development of vehicle concepts producing maximum interior versatility within minimal exterior dimensions – and all while delivering unbeatable driving fun.