

The three-row-seating minivan was pioneered in Japan by Mitsubishi Motors Corporation (MMC) with the first-generation CHARIOT in 1983. It has since become the vehicle type of choice for a huge proportion of motorists. MMC's fourth-generation vehicle in this category appeared in the market in May 2003. Named the GRANDIS, it's a future-oriented minivan that offers a new array of standard-setting features to complement users' lifestyles.

1. Targets

Since the beginning of the 21st century, consumers have shifted their priorities toward products whose attraction lies in painstaking attention to detail. In developing the GRANDIS, MMC sought to accommodate the customer priorities of today and tomorrow with a comfortable, sporty, three-row-seating minivan offering emotionally appealing design, smart performance, and freedom of personal coordination.

2. Features

- Emotionally appealing design

(1) Flowing exterior lines and surfaces

A three-diamond emblem in the center of the front grille defines the new MMC design identity and forms the locus from which lines and surfaces manifesting emotionally appealing next-generation minivan styling flow all the way back to the tail. The body contours express Japanese aesthetic sensibilities by creating a look that changes subtly with the light or angle of view.

The unique visual characteristics of light-emitting diodes are exploited in the rear combination lamps, high-mount stop lamp, and door-mirror-integrated turn-signal lamps, making the GRANDIS immediately recognizable even at night.

Further, a choice of two exterior styling packages (Elegance, which conveys a relatively refined personality, and Sports, which creates a more purposeful, dynamic image) accommodates customers' individual tastes. Each exterior styling package creates the



desired visual effect by means of exclusive designs for the bumpers, side-sill garnishes, front grille, and other exterior items.

(2) A cabin embodying Japanese aesthetic sensibilities

The interior environment sets new standards that transcend the conventional perception of luxury.

A gently undulating wave-type form for the instrument panel helps to create a sense of roominess and relaxation in the cabin, and the instrument panel is finished with a special coating whose hue changes subtly with the angle of view, giving expression to the traditional Japanese aesthetic values attached to the beauty to be found in the transition of light through different shades. The form, color, and luster of the wood-grain or metallic materials used on the center panel are synergized to bring out the essential feel of the materials. And the Japanese aesthetic of transition is reflected in the seat upholstery, which is interwoven with a lustrous fiber that generates a rich variety of visual expression as the light falling on it changes.

Further, a choice of two interior styling packages (Elegance and Sports, each of which conveys a distinct personality through its own meter coloring, center-panel finish, and seat fabrics) accommodates customers' individual tastes.

- Smart performance

(1) Efficient packaging permitting superior maneuverability

The GRANDIS has a greater overall length than its predecessor, so it has 100 mm more usable interior length, which helps to realize the generous cabin roominess and luggage-area capacity that minivan users expect. Although the body is larger than that of the GRANDIS's predecessor, the GRANDIS maintains its predecessor's acclaimed maneuverability and has a class-leading minimum turning radius of 5.5 m.

(2) New platform realizing superior collision safety

A newly developed platform realizes class-highest levels of collision safety, structural stiffness, and vibration and noise suppression. Reflecting MMC's Refined Impact Safety Evolution concept, it's structurally designed to effectively absorb and disperse impact energy while minimizing cabin deformation.

Further, the cabin has a six-way airbag system including curtain airbags that extend beyond the second row of seats. And for child safety, the second-row





seats each incorporate retaining bars and a top-tether anchor for an ISOFIX child seat.

(3) Newly developed 2.4-litre MIVEC engine

A newly developed 2.4-litre engine gives the GRANDIS outstanding running performance and environmental performance. A Mitsubishi Innovative Value lift and timing Control (MIVEC) system on the engine ensures optimal driveability and performance across the entire rev range by switching between low- and high-speed cam profiles for the two intake valves on each cylinder. At the same time, the engine is exceptionally fuel-efficient and has exhaust emissions so low that the GRANDIS is certified as an ultra-low-emission vehicle.

(4) Superior ride quality and Multi-Select 4WD System

A suspension system that's optimally tuned for a minivan delivers taut, precise handling together with a flat but forgiving ride for all occupants.

Four-wheel-drive (4WD) versions of the GRANDIS are equipped with MMC's new Multi-Select 4WD system, which delivers all-surface traction and control similar to those of other 4WD systems but is lighter and permits superior fuel economy. Exploiting the benefits of electronic control, it offers three operating modes (4WD mode, 2WD mode, and LOCK mode) to accommodate diverse driving conditions.

(5) New-concept seating flexibility

The seats in the GRANDIS incorporate newly conceived features that accommodate the full spectrum of user needs: The first-row passenger seat has MMC's acclaimed Useful Seat design, which allows secure retention of shopping bags or briefcases. The second-row seats each have a Relax Mode function that allows the user to position the squab at any of three angles for comfort and relaxation. And the third-row seats can be individually stowed under the floor with minimal physical effort for flexible accommodation of various passenger- and luggage-carrying needs.

The underfloor stowability of

the third-row seats and a tip-and-tilt function in the second-row seats can be combined with the luggage area to create exceptionally spacious, flexible accommodation for luggage items of diverse shapes and sizes.

(6) Confidence-inspiring security measures and user-friendly appointments

For protection from thieves, every GRANDIS version is equipped with an advanced security system consisting of an immobilizer and a security alarm. And to promote driving safety, a newly developed Dual Around Monitor system supplements the driver's lateral field of view with images from a nose-view camera.

Navigation assistance is provided by a version of the Mitsubishi Multi-Communications System that supports Digital Versatile Disc navigation functions. Combined with this system are an AM/FM radio, a MiniDisc player, and a six-disc CD changer. The control panel for these items is designed to neatly complement the wave-form dashboard. Rear-seat passengers are provided with a seven-inch overhead liquid-crystal display. Audio and video played for rear-seat passengers can be different from those for first-row occupants.

A number of other features makes the GRANDIS experience even more enjoyable. One such feature is a cabin material that absorbs and harmlessly breaks down odors and chemical substances. Another is solar-control glass that protects occupants from ultraviolet and thermal radiation.

- Freedom of personal coordination

The Customer Free Choice system, which has already earned high praise from COLT owners, gives GRANDIS customers the freedom to tailor their vehicles to suit their personal tastes. In terms of styling and color alone, there are 160 selectable combinations.

3. Major specifications

The major specifications of the GRANDIS are shown in the following table.

Specifications	Model code	Mitsubishi UA-NA4W	
		2WD	4WD
Overall length (mm)		4,755	
Overall width (mm)		1,795	
Overall height (mm)		1,655	
Weight (kg)		1,620	1,700
Min. turning radius (m)		5.5 (with 16-inch wheels); 5.8 (with 17-inch wheels)	
10-15-mode fuel consumption (km/L)		11.4	11.0
Engine type		4G69 MIVEC	
No. of cylinders; valvetrain		4 in line; 16-valve SOHC	
Max. output {kW (PS)/rpm}		121(165)/6,000	
Max. torque {Nm (kg-m)/rpm}		217(22.1)/4,000	
Transmission type		INVECS-II with Sport Mode 4-speed automatic transmission	
Suspension	Front	MacPherson struts with coil springs	
	Rear	Semi-trailing arms with coil springs	
Tires		215/60R16; 215/55R17	

(RV Product Development Project, Research & Development Office: Kuzuoka, Kishi, Miyanaga)
(New Product Project, Product Planning & Program Management Office: Ito)