

Design of New FIT

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ABSTRACT

The new FIT, designed with the goal of making it the “best compact car,” was created under the overall concept of the “Next New Small.” Universal values demanded the world over were realized in its compact-automobile design, engine performance (agility), economic value, versatility (space), safety, and eco-friendliness.

The design team created an exterior design that incorporates roominess with the advanced “super-forward cabin.” They combined it all with the “super-forwarding form” concept that expresses the dynamic ruggedness of the frontward-leaning frame giving the new FIT a unique feel and look.

For the interior, the designers created the new cabin under the concept of an “advanced-feel personal interior,” with the fusion of a compact cockpit and a roomy, exhilarating space. The result is enhanced functionality, including an easy-to-use, simple seat arrangement, in a new FIT that is a thrill to drive each time you slide behind the wheel.

1. Introduction

Released on June 21, 2001, the first generation Fit was developed out of the desire to create a compact car that would be accepted the world over based on a “compact revolution.” The car became a huge hit with its concept incorporating the three maximums a compact car - Maximum fuel efficiency, maximum fun, and maximum cool. The Fit is now sold in 115 countries and has become much loved by countless car owners.

Now, more than six years later, the value of a multipurpose, compartmentalized car has become more accepted, thanks to changes in lifestyle and increased environmental concerns that have led to a worldwide trend toward downsizing. The role of compact-class cars has also been transformed from “something to get around in” to “a primary car.” The designers of the new FIT, aiming to make it the global standard for compact cars, became further convinced of the need to meet demands for the universal values associated with compact cars - design, engine performance (agility), economic value, versatility (space), safety, and eco-friendliness - and to evolve them further.

With regard to the design, its roomy cabin, smooth ride, versatility and package design have greatly evolved from the frame up. We developed the new FIT with the objective of creating a high-quality vehicle that would accentuate the individuality of the owners of these

compact cars. This is the concept that should be applied to all compact vehicles. By realizing this at a high level we will be creating the “Best Compact Car.”

2. Package Layout

The concept for the package design “Zenshin—Cabin Compact” is a fusion of a cabin that is both full-bodied and forward-leaning, focusing on a strong, sporty stance, spacious cabin, and evolved usability, crating a new rugged small car. (Fig. 1)



Fig. 1 Package concept

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To help achieve this, the wheelbase dimension was increased by 50 mm over the first-generation Fit and the tread size was increased on the large tires. The tires were moved to the corners of the car giving it a lower center of gravity and a more stable feel.

Meanwhile, the bottom of the windshield was moved approximately 100 mm forward creating an advanced “one-motion form,” producing a wider forward space. All this resulted in a spacious, exhilarating vehicle that exceeds the level of its class.

The distance between the front and rear seats of the new FIT has increased, as compared to the prior Fit, and by using a recessed headrest the designers have realized “dive-down” seats in one swift motion with the simple and easy-to-use “ultra seat.” Furthermore, by taking advantage of the space used for the spare tire, the designers have included an under box; an under-floor storage compartment that can hold up to about 60 L. This allows the driver to use the limited space of the small car to its fullest advantage making the car both more convenient and more versatile.

3. Exterior Design

For the exterior design, the designers of the new FIT chose to fuse the roominess of the first-generation Fit with the dynamism of its smooth ride into the “Super-Forwarding Form.” The unique advanced-feel monoform frame - with its forward leaning dynamic body that appears as if it’s being pushed from behind - is an exciting design that is instantly recognizable as the new FIT. (Fig. 2)

The exterior design derives from the three-dimensional cabin space that extends from the more forward positioned pillar to just behind the space above the rear seats. The rear fender combines with a rugged rear bumper protruding from the body, and a sharp character from the surface molding gives the FIT a blocky look. By incorporating these aspects into the design of the new FIT the designers were able to realize high quality and a

uniquely innovative and uplifting form, and at the same time creating a car that takes into consideration fuel efficiency and aerodynamics.

The FIT also includes expansive side window graphics, a narrow bowed front pillar and a large front corner glass, giving the car an enhanced field of vision. (Fig. 3)



Fig. 3 Side view



Fig. 4 Front view



Fig. 5 Final rendering

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Fig. 2 Super-forwarding form

The large, angular headlights have been extended toward the grill giving the new FIT an undaunted, yet familiar look - one of youth and excitement - while at the same time bringing in the corners making it easier to take tight turns. The new lights provide a wider area of illumination to the sides of the new FIT thus allowing the driver to see more and make it easier to take tighter turns. (Fig. 4)

By bringing in the rear of the cabin and extending bumper form to the sides, the FIT has been given both a personalized image and a stable, strong sporty stance. (Fig. 5)

4. Interior Design

We call the interior “forward personal interior.” It is a concept forged from the fusion of a new type of spacious, open cockpit, and a more compact space. (Fig. 6)

The upper faces of the instrument panel have been lowered while the nuances of the dash’s sculptured design have been accentuated resulting in a perception of wider surroundings, and an instrument panel that appears wider than it actually is.

With the front pillars moved forward, the front corner glass has been made larger, and the width of the pillar in the field of vision has been decreased by 25 mm. This accentuates the new FIT’s panoramic field of view giving it a feeling of openness, and enhancing visibility.

As for visibility, the three-dimensional, large gauges are easier to see. Control functions have been moved to the upper part of the driver’s side making them easier to use and emphasize the FIT’s driver-oriented sportiness. Other parts of the instrument panel look spacious. All these elements combined to create the revolutionary cockpit of the new FIT (Fig. 7).

Furthermore, by including a variable lid for the under box storage room located under the floor in the luggage



Fig. 6 Advanced feel personal interior

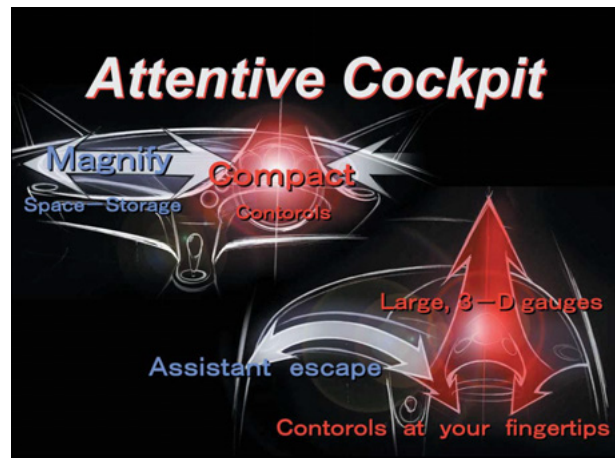


Fig. 7 Attentive cockpit



Fig. 8 Ultra luggage

space, the upper and lower part of the luggage space can be split in two, an idea dubbed “ultra luggage.” (Fig. 8) With the glove compartment also designed using the two-level system, the vehicle’s storage space has been made exceptionally versatile.

The designers of the new FIT have also increased the comfort of the seats and reshaped the seatbacks, giving the seats the refreshing roomy sensation of a higher-class car.

5. Color Design

5.1. Exterior

To communicate the sporty and advanced design of the exterior, we have developed strong, transparent “Brilliant Exterior Colors,” based on the theme “brilliance.”

The newly developed “Brilliant Sky M” has been chosen as the theme color for the 1.3 L model FIT. Using a vibrant blue that evokes the exhilaration of a blue sky, the color was given punch by emphasizing the tough

body's variability with a color that has red highlights on the shaded parts of the car.

Four other colors have been developed with premium interiors and exteriors in mind. Including already existing colors, owners can choose from 12 color options. (Fig. 9)

5.2. Interior

The theme of "brilliance" has been carried over into the interior. Through the concept of "Brilliant Interior Color," the designers have continued their pursuit of higher quality and innovation. The designers sought an "emotional coordination" by including seats with decorations that make them stand out instantly in the black interior.

The seat material in the 1.3 L FIT includes lamé and a dotted pattern, as well as embossing, creating a rich, shining crisscross pattern. Adding further accessories in gunmetal, the cabin space is given a casual, sporty feel. (Fig. 10)

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Fig. 9 Exterior colors

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Fig. 10 Interior colors

6. RS Design

The RS has been designed for certain types of drivers, including those who want a sporty, youthful car or car buffs who are interested in downsizing. For these drivers, we have designed a strong and dynamic looking exterior and a sporty, quality interior.

The new FIT was designed to have a strong presence and drive, as if sailing majestically down the road, making it stand out from others in its class.

6.1. Exterior

With the concept of "more dynamic" and "stronger," we sought to give the new FIT a solid presence that predicts a powerful ride emphasized by its low center of gravity and wide stance.

Silver metallic molding has been placed on the gunmetal upper grill. With the wide-open lower grill and low, wide prominent bumper design unique to this model, an image of fearlessness has been realized.

The large tires have been further enhanced with a 16-inch aluminum wheel design, while the lowered vibrant side garnish gives it a more virile, sportier design.

In addition, the rear defuser on the new FIT has been placed in a lower position and has been given a black motif. Coupled with the bumper design, the result is a sportiness that gives the car a powerful presence. (Fig. 11)



Fig. 11 RS exterior design

The theme color for the RS model is “PREMIUM DEEP VIOLET M,” which uses glass particles to create a shimmering effect. The unique transparency and depth of glass provides a brilliance fit for the true “downsizing” enthusiast - the target drivers.

6.2. Interior

Based on the idea of a refined “Adult Contemporary” mood, the interior of the new FIT has been designed to reflect a mature, high-quality sportiness. The seats are covered with a suede-like fabric with single stitching, as well as the same lamé and dotted pattern found in the 1.3 L, placing it on equal footing with higher-class cars. The seats are representative of the overall high quality.

The center panel includes brown satin fittings, while the areas around the controls, gauges and steering wheel have been given a sharp look with metal fittings—all contrasting with the dark, stylish interior. (Fig. 12)



Fig. 12 RS interior design

7. Conclusion

The much loved and highly valued first generation Fit belongs to the compact class, which contains many worthy and highly competitive cars.

With the new FIT we aimed to create the “best compact car.” The new FIT has been thoroughly redesigned from its frame and package design up emphasizing its strengths of compact car values - its design, engine performance (agility), economic value, versatility (space), safety and eco-friendliness.

We truly believe that the result of our work is expressed in the charm of the new FIT’s futuristic form, which is dynamic and expresses the joy of driving, as well as in the cabin, which creates the sensation of a higher class of car.

We hope that the new FIT will fit into the lives of our customers the world over, just as the first-generation Fit did, and will continue to be loved.

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