

Styling Design for 2018 Gold Wing

Yasuhiro SATO¹Nobutaka WAKITA²

ABSTRACT

In order to meet the values of our next generation of customers, Generation X, the design key words we used when designing the 2018 Gold Wing were lightweight and compact, essence of a motorcycle, advanced design, and high quality. These words were aimed at portraying a design that provided conciseness of form with the spaciousness required by an adult rider. The styling theme was “Styling with Refined Sharpness and Tension.” With this concept, we wanted to represent the vehicle body with qualities similar to those of a top athlete, refined and powerful to the utmost extent but free of excess weight and with the sense of internal physical capabilities invisible from the outside but hidden just beneath the surface. In addition, we focused on representing the grandeur, premium feel, and high quality appropriate for Gold Wing as the flagship motorcycle model produced by Honda. These ideas were incorporated into each of the design sketches and modeling activities, down to the finest details, in order to create a Gold Wing design that connected with the next generation.

1. Introduction

The Gold Wing has been the flagship model of Honda motorcycle ever since it went on sale in 1975. Mainly supported and shaped by North American customers of the baby boomer generation, each new model has brought with it advancements that have built the Gold Wing brand that exists today⁽¹⁾. With its luxurious equipment and dignified size, the Gold Wing has maintained its one-of-a-kind status among motorcycles, just as its concept of the “King of Motorcycles” implies. The Gold Wing’s singular and unmatched presence has made its name known to riders throughout the world.

2. Knowing the Customer

As previously noted, the customers who have long supported the Gold Wing are the baby boomer generation. As of 2018, however, baby boomers mainly consist of people aged 60 years and older (Fig. 1), and there are increasing requests for decreased vehicle weight and enhanced maneuverability. In addition, we had begun to question how the generation succeeding the baby boomers, Generation X, views the current Gold Wing. Against this background, our development team decided to conduct a customer survey in North America, the main market for the Gold Wing.

2.1. Survey of Traditions – Meeting the Customers Who Cherish the Gold Wing –

In June 2012, in order to determine the ideal form for a potential new Gold Wing, we attended Americade, one of the world’s largest touring motorcycle event, which is held annually in Lake George, New York (Fig. 2). Attendees of the event were generally older, appearing to be mainly 50 years of age or older.

Considering just the Honda products present, most were Gold Wings (Fig. 3). There were many successive generations of Gold Wings at the event, from the first

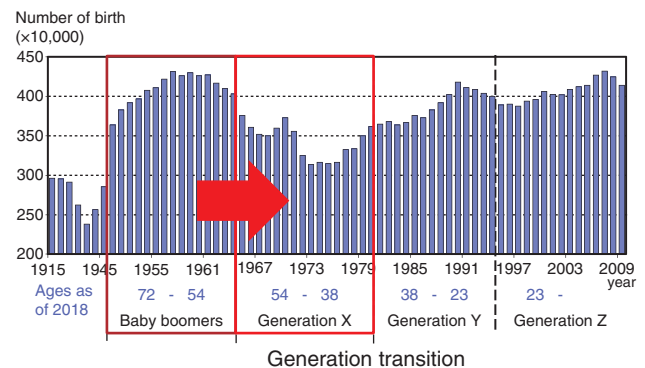


Fig. 1 Demographic distributions of Baby boomers and Generation X, and their ages as of 2018

¹ HONDA R&D AMERICAS, INC.

² Motorcycle R&D Center



Fig. 2 People gathered at Americade and their motorcycles



Fig. 3 The Gold Wings gathered at Americade site

generation to the present, and many loyal customers were present as well. Quite impressively, many Gold Wing customers were loving couples who were tandem riders.

One of the characteristics of the baby boomer generation is that they enjoy gathering with others at these types of events. Seeing the people gathered at this event made us realize how our customers have cherished their Gold Wings over the years and continue to enjoy riding these motorcycles.

2.2. Current Gold Wing Customers

Many of the Gold Wing customers gathered at Americade appeared to be over 60 years old. The scene

at the event seemed to indicate that Gold Wing has been supported by a greater proportion of customers from the baby boomer generation than we had imagined which elicited a sense of concern, since we saw only a few customers from subsequent generations. It was time to ask why the Gold Wing had fallen short of its goals over time.

We strongly felt that it was necessary to explore a new concept for the Gold Wing in order to develop model that meets the values of customers of the next generation, who love touring, and that we must appeal to those customers.

2.3. Two Issues for the Next Generation of the Gold Wing to Address

As a result of communicating with many customers, two major issues began to emerge with regard to redesigning the Gold Wing.

The first was a lack of “advancedness.” The successive generations of the Gold Wing were advanced and modern, employing the latest technology from each period. However, as of a survey conducted in 2012, the model sold in 2001 had not undergone a full model change in the past 11 years. Therefore, the style, specifications, and equipment were in need of an upgrade. The allure and advanced image which should be provided as a flagship model were reduced, and the Gold Wing was losing its competitive advantage.

The second issue was a lack of “versatility.” A “Customer Made Current Gold Wing” is handed down in our company, and this implies that it is the Gold Wing’s customers who increased the product’s value and had contributed to the success of Gold Wing. However, at the release of each generation, the Gold Wing was developed in a direction that

prioritized long-distance touring comfort and luxury, and as a result, the vehicle became larger and heavier, which began to limit its usage. This ultimately restricted the appeal of the Gold Wing to certain groups of customers and prevented the vehicle from meeting other customer demands for versatility of usage. In other words, this is one of the reasons why new generations of users, including Generation X, were not brought in.

If the Gold Wing does not address the two issues, the lack of advancedness and versatility, we believe it will not have a future in the market.

2.4. Design Directionality

We decided to clarify specific methods by which the styling designers could address the issues identified in the previous section.

First, with respect to the lack of advancedness, we decided to equip the Gold Wing with advanced equipment aligned with the values of the next generation of customers and to develop functional and attractive packaging. Thereby, we would present the Gold Wing as a modern vehicle, equipped with the latest technology in line with the age to come.

Next, with respect to the lack of versatility, we decided to depart from the large and heavy design and develop a lighter motorcycle with a compact body appropriate for the versatile usage required by the next generation of customers. This allows us to present the Gold Wing as a vehicle not limited to long-distance touring but capable of being enjoyed for other purposes as well.

The tradition of comfort and luxury that has been passed down through the Gold Wing models must also be updated to suit the current generation of customers.

3. Challenges to Achieving the Next-generation Gold Wing Design

3.1. Next-generation Representation and the Essence of the Gold Wing

An advanced Gold Wing design can be achieved by

selecting technologies and interfaces suited to the Gold Wing concept, from among the variety of those developed over the last decade.

However, our decision to develop a lightweight, compact body, as a means of addressing the issue of versatility, presented a design conflict. The Gold Wing proportions, themselves, have always provided customers with a sense of grandeur and magnificence of size, features passed down from generation to generation. These characteristics are the precise embodiment of the Gold Wing's another name, the "King of Motorcycles." Therefore, there is a concern that transitioning to a lightweight and compact design might result in a loss of the Gold Wing's essential, defining characteristics.

To address that concern, we decided to style the vehicle by emphasizing proportions that confidently reflected a sense of stateliness and grandeur, while at the same time rendering the body size more compact, in order to continue to express the essence of the Gold Wing.

3.2. Study of the Design Concept Model

In deciding the specific styling direction, we first created a design concept model (Advanced Design 1: AD1). We aimed to accurately reflect the design concept in the product design, which was an approach that had not been used in previous development efforts. Later, development proceeded through an issue verification model (Advanced Design 2: AD2), followed by a production model, in a three-stage process; the details of the model creation process are described in the paper "Styling Design for 2018 Gold Wing – Clay model –⁽²⁾."

Designers from R&D in both the U.S. and Japan collaborated to create the AD1 model, and many sketches were drawn. Proposal A and proposal B, shown in Fig. 4, were selected as the final candidates from those sketches.

Both proposals reflected a modern, lightweight, and compact package, styled to radiate a sense of presence and status, meeting the requirements of advancedness and versatility. Additionally, the functional beauty of the design was represented by emphasizing the horizontally opposed



Proposal A



Proposal B

Fig. 4 Two proposed styling concepts

six-cylinder engine and showing the functional parts around the engine as much as possible. These proposals eliminated the sense of excessive integration and highlighted each individual part or element to express the essence of a motorcycle.

Proposal A inherited the design of the previous generation (Fig. 5), featuring a backward-leaning character line that tilted downward in the rearward direction from the top of the middle cowl to the bottom of the pannier case, and the traditional horizontal motif, consisting of a line and the horizontally opposed engine of the successive generations of the Gold Wing. These lines created stately proportions resulting in a design that reflects a sense of stability (Fig. 6).

Although proposal B also had a backward-leaning character line similar to that of proposal A, it additionally featured a forward-leaning character line traveling from the bottom edge of the lower cowl to the bottom edge of the rear trunk box or bottom edge of the pannier case. These qualities resulted in a design that expresses a sense of sportiness (Fig. 7).



Fig. 5 Character lines of former Gold Wing



Fig. 7 Character lines of proposal B



Fig. 6 Character lines of proposal A



Fig. 8 Mockup model representing selected design concept

4. Creation of the Production Model

4.1. From King to Premium: Sharing Premium Concept

By completing AD1, a styling direction representing advancedness and versatility was decided. Also, the development concept of this model was changed from “King of Motorcycles,” which had previously been used for the Gold Wing for many years, to “The Honda Premium Tourer-More exciting and fulfilling riding experiences for rider and passenger⁽¹⁾.”

In light of this, all of the design team members handling the development of the production model went to work having formed a shared consciousness regarding the word “premium,” the core development concept.

Many discussions were held while keeping the levels of each following idea in mind as to whether “premium” referred to the premium qualities of the product in a general sense, the premium qualities of a motorcycle, or premium qualities specific to the Gold Wing. The answer to this question lays in the latter half of the development concept of “More exciting and fulfilling riding experiences for rider and passenger.” It was the idea that premium qualities were found in a lifestyle that incorporated a Gold Wing, rather than being qualities of the vehicle itself.

In line with this interpretation of premium, a single scenario was created in order to facilitate a shared image of this concept. This image was a scene in which a sophisticated adult couple, who rides a Gold Wing, rides up to a street corner in a high-class resort area lined by luxury brand shops. They change their jackets to walk through the city and enjoy a meal or tea at a restaurant. They can do a little shopping without concern, since the vehicle has a large trunk. This scenario symbolizes versatility, and it differs from the previous scenario for customers who are mainly long-range touring riders. This scenario is shown in Fig. 9.

The aim of the design was to inspire admiration in others for the freedom portrayed in the scene. The idea in this scenario was utilized as the cornerstone for a common image when designing each of the parts.

4.2. Design Keyword and Styling Theme for Realizing the Production Model

The following four terms were established as the design keywords required for the production model to realize the advancedness and versatility that were promoted when creating AD1 and to reflect the scenario interpreting premium as derived from the development concept.

- (1) Lightweight and compact design
- (2) Essence of a motorcycle
- (3) Advancedness
- (4) High quality

The design keyword we gave highest priority to was (1) lightweight and compact design. The theme was set as “Styling with Refined Sharpness and Tension.”

Re-clarifying the styling theme had the effect of consolidating the idea for the designers as a whole, while allowing them to apply their own individuality and talents. The style sketch of the production model that was based on this theme is shown in Fig. 10. The specific ideas and implemented details are explained below in accordance with the above-specified design keywords.

4.3. Realization of the Design Keywords

4.3.1. Achieving lightweight and compact design, and styling with refined sharpness and tension

The important feature for appealing to Generation X, who we focus on as users of next generation, is versatility with minimal restrictions on the way the vehicle can be used. The key to achieving this feature is a lightweight and compact design.

As depicted in the scenario in Fig. 9 of the previous Section 4.1., the new design allows customers to travel through city streets with agility, or sporty, winding roads with a fluttering heart (Fig. 11), while the touring potential that has long been a mainstay of the Gold Wing allows comfortable, tandem riding at a slower pace on the weekend (Fig. 12). This is the type of versatility with broad capabilities that is desired.

We wanted to create an image of the physique of a



Fig. 9 Conceptual photos of active pair with the Gold Wing

top athlete or boxer who was stoic, refined, and prepared to win, and to express that image through the appearance of the vehicle. The image is that of the beauty of a trim body, absent of any excess weight and refined to the utmost extent, with the sense of tension that occurs directly before participating in a competition (Fig. 13).

This image was realized during design, through a form, that provided a sense of internal strength and tension that

achieved the desired lightweight and compact nature, and not through a lightweight and compact style, with a simple and superficial representation of form.

4.3.2. Representation of the essence of a motorcycle

The initial Gold Wing was a bare motorcycle that was not equipped with a cowl or trunk box (Fig. 14). The minimal-vibration property of the engine and the low



Fig. 11 Driving on winding roads



Fig. 12 Touring in tandem riding



Fig. 10 Drawings for designing production type model



Fig. 13 Styling theme

center of gravity of the vehicle satisfied the characteristics required for a touring motorcycle, and therefore, the product was also supported by customers of long-distance touring motorcycles. Later, the Gold Wing continued to mature as a motorcycle suited to long tours such as a coast-to-coast journey across the U.S. Among these transitions, the large fairing design, which was one of the characteristics of the Gold Wing, was continually developed with each model change into an integrated design over the entire vehicle. As a result, the mechanical parts that were initially in plain sight were concealed beneath fairings and covers. In addition, as the design of each part was integrated, the alignment structure of parts and the processing of the panel and its periphery became increasingly similar to the interior furnishings of automobiles.

Therefore, the zone stretching horizontally from the frontal body to rear body, which has been inherited in the exterior designs of successive Gold Wing models, was defined as the “Mechanical Line.” A design that actively showed functional parts, such as the exhaust pipe, was employed to emphasize the mechanical parts, mainly of the horizontally opposed six-cylinder engine (Fig. 15).

Accordingly, the entire vehicle body design reflected a sense of integration, and while simply and clearly completed, the essence of the motorcycle reflected during the period when the mechanical parts were visible, was gradually lost. In the present development of the Gold Wing, for we wanted to strongly reflect the essence of a motorcycle allowing good agility, thus consideration was

given to prevent excessive design integration.

The surface was designed so that the area around the engine appeared static compared with the sense of movement suggested by the surface treatment around the upper body of the vehicle. Through these surfaces, we attempted to express the unique beauty of an elaborately designed machine⁽³⁾. Thus, the design intentionally shows a strong contrast between the area around the upper body of the vehicle, which is represented dynamically, and the area around the engine, which is represented statically.

In addition, a design representing the essence of a motorcycle was not only applied to the parts that were externally visible, but also to internal mechanical parts underneath covers and others. The designed parts were, for example, the compositional parts of the double wishbone type front suspension that was used for the first time in a Gold Wing (Fig. 16), the rear swing arm, and the transmission cover.

When designing the functional parts, such as those in the example above, we were conscious to make the meaning and role of each part could be sensed through its shape. Our aim was to represent the essence of a motorcycle through comprehensive functional beauty that blended function and design to a high degree.

4.3.3. Representation of advancedness

Each new model of the Gold Wing incorporated the latest technology of its period at the time of model change. In styling the current Gold Wing, we portrayed the sharp outer appearance as the “representation of advancedness” to make it appear more “cool.”

The area surrounding the upper body of the vehicle was shaped to produce a sense of youth and lightness by representing the surface with sharp lines and edges and strong tension connecting the lines. In particular, to further strengthen the image of the front fairing as being sharp and dynamic, we designed it with a slanting nose to give the impression of it slicing through the air.

Furthermore, in the headlamp, which is considered the face of a vehicle, we used the most recent vehicle lamp body with a multi-lens LED, in order to catch the attention of observers⁽⁴⁾ (Fig. 17).

For the cockpit, which is always within view of the rider, we aimed for a design that allowed instantaneous acquisition of large amounts of information, ease of



Fig. 14 1975 Gold Wing (first generation)



Fig. 15 Horizontally-opposed six-cylinder engine and its design composing “Mechanical Line”

operation, and creating an advanced atmosphere. In addition, by producing the first motorcycle in the world that is equipped with Apple CarPlay (Apple CarPlay is a trademark of Apple Inc.) (Fig. 18), we have demonstrated our commitment to technology and provide the most recent technology available to attract people living in the new era.

4.3.4. Representation of high quality – Portrayal of hospitality –

High quality was expressed in the complete vehicle by combining a suspension providing the highest comfort ride⁽⁵⁾, a silky, low-vibration horizontally opposed six-cylinder power unit⁽⁶⁾, and a smooth 3rd generation dual clutch transmission (DCT)⁽⁷⁾.



Fig. 16 Double wishbone type front suspension



Fig. 17 Multi LED configured headlight adopting latest lighting technology for vehicles

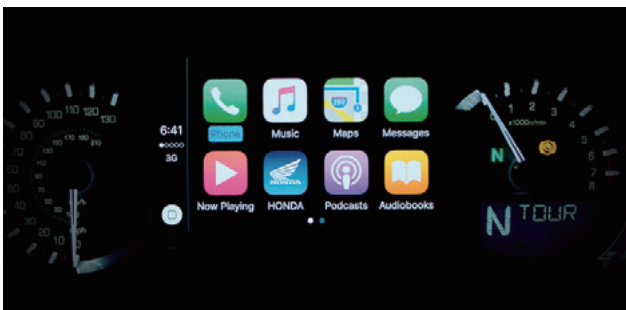


Fig. 18 Apple CarPlay

In order to represent high quality in the external design as well, we considered how to ensure a hospitable feel to each of the parts for our customers.

For example, for the coloring, we developed two new colors especially for the current Gold Wing; they were red and brown candy colors of high saturation and deep shadowing that instantly excites the heart when viewed and leaves a strong impression on the viewer⁽⁸⁾ (Fig. 19).

A digital speedometer and tachometer were not used; we intentionally employed the analog type. The needles and dials were designed in fine detail (Fig. 20), offering a sense



CANDY ARDENT RED



PEARL STALLION BROWN

Fig. 19 Newly designed two colors specifically for developed Gold Wing



Fig. 20 Analog type tachometer

of high quality reminiscent of a luxury watch. The nighttime illumination of the meters was devised to allow the rider to appreciate the luxury of the design, for example, by the use of light cast from the needle tip onto the metallic dial ring.

The design and testing departments collaborated on devices with which the operator would have direct contact, such as switches, dials, and directional buttons, imparting the most appropriate level of damping in order to achieve a gentle contact sensation. This allowed high quality to be experienced through the sense of touch in the fingertips during operation (Fig. 21).

In addition, we were particular about the sense of quality and the tactile sensation of the seat that the rider would use for an extended period of time, and we developed a surface skin with a dedicated embossed pattern (Fig. 22). In this way, we did not stop at the mere outer design, but rather aimed to achieve an even higher sense of high quality⁽⁸⁾.

Further, the emblem was designed using the motif of an imaginary lion with wings, which has been passed down from previous generations of the Gold Wing, so that the finished design was fine and elegant (Fig. 23). We designed

this emblem with hope that it will symbolize the pride of the Gold Wing as a flagship model and customers will feel the joy of owning a Gold Wing.

4.4. Completion of the Production Model

Figure 24 shows the produced vehicle. When developing the 2018 Gold Wing, we used the AD1 styling direction to set a new styling theme for production.

The premium quality presented in the development concept was shared by illustration, and it was used as a basis of our imagination.

By setting the design keywords lightweight and compact design, essence of a motorcycle, advancedness, and high quality, we aimed to realize the theme “Styling with Refined Sharpness and Tension.”

The styling design that represents youthfulness was established keeping customers in Generation X in mind, while maintaining the flavor that Gold Wing has inherited.

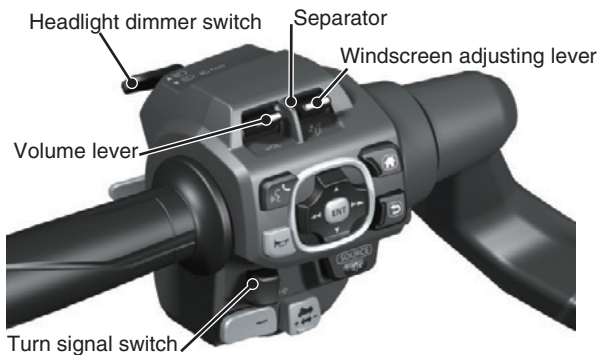


Fig. 21 Handle switch design that makes fine quality feelings through operations



Fig. 23 Vehicle emblem



Fig. 22 Texture of seat devised with high ingenuity



The Gold Wing Tour DCT Airbag (2018)

Fig. 24 Production model of 2018 Gold Wing Tour

5. Conclusion

In order to achieve advancedness and versatility, the Gold Wing was represented with confident proportions that maintained the heritage of the horizontal line while still allowing the vehicle body to be compact. While possessing presence, stateliness, and high quality, the new model lived up to reputation of successive Gold Wing models and greatly restored youth.

This allowed a styling design embodying the development concept “The Honda Premium Tourer” to be achieved.

The designers involved in this development effort contributed to more than 200 parts both large and small. The new Gold Wing design represents a compilation of the best ideas and techniques of the designers who handled each design process.

We designers sincerely hope that the Gold Wing brand, which was built over many years, will continue to connect with subsequent generations and that the design reinforces the love that customers around the world have for the Gold Wing.

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■ Author ■



Yasuhiro SATO



Nobutaka WAKITA