

2020 MODEL INFORMATION



MODEL NAME

Z H2

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Supercharged Z Flagship Marks Beginning of New Era

With its refined naked styling and Balanced Supercharged Engine, in addition to performance that can be enjoyed across the rev range combined with superb fuel efficiency, this innovative new model offers high levels of handling and comfort, plus the latest equipment – all suitable features for the new Z Series flagship.

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Arrival of Next-Generation Z

The Z brand has a rich history that stretches back almost 50 years. Now with the arrival of the Supernaked Z H2 with its supercharged engine, the second chapter of Z history is about to begin. A distillation of the vast technology possessed by Kawasaki Heavy Industries, Ltd., the innovative Z H2 is a motorcycle worthy of title “ultimate.” This new flagship model will lead the Z Series into the future.

Powered by a Supercharged Engine

The Z H2’s most defining feature is its supercharged engine. While the idea of a supercharged engine may call to mind an extremely high powered motorcycle that only a handful of riders are able to ride in very limited conditions, Kawasaki’s modern development philosophy called for a machine that enables a wider range of riders to understand the pleasure of riding a motorcycle. Kawasaki’s supercharged engines were designed with this idea firmly in mind. The Z H2’s supercharged engine achieves the seemingly contradictory goals of ample power and easy-to-manage power delivery.



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Delivering Both High Power and Manageable Power Delivery

A development hint came in the form of market feedback: “If you had a powerful naked model that was also easy to ride, you would be more likely to want to ride it every day, regardless of where you had to go.” Toward that end, its supercharged engine – the product of KHI Group technology – was further advanced, and various equipment designed to control its power was developed. At the core, Kawasaki’s advanced electronic rider support systems and an all-new trellis frame are joined by front and rear suspension with model-specific settings. In addition, each part down to the smallest detail was thoroughly investigated to maximise its functionality and minimise weight. From the relaxed, upright riding position and optimised dimensions that contribute to light handling, to the torqueful low-mid range settings that facilitate riding in town, all were carefully considered to enable riding in a wide range of situations and conditions.

Z Series Flagship

An engine that delivers the power you expect when you ask for it, a chassis that delivers superb manoeuvrability while harnessing the engine’s massive power, comfort that enables you to ride for long distances without undue stress or fatigue, and a host of advanced equipment designed for maximum functionality are all elements found in the new Z H2. The latest evolution in a brand with a long and rich history, and offering unique values that generations of Z riders have enjoyed, it proudly takes its place at the head of Z Series. Delivering both incredible power and ease of use in a Supernaked package is groundbreaking, injecting new life into the naked motorcycle market. The Z H2 is truly unique, strengthening the idea that “supercharged engine = Kawasaki,” and offering a glimpse of future models to come.



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Engine

- * Balanced Supercharged Engine with a maximum output of 147 kW (200 PS)*
- * 998 cm³ liquid-cooled DOHC 16-valve In-Line Four delivers consistent high performance
- * Intake/exhaust characteristics and FI settings selected to deliver strong low-mid range torque
- * Assist & Slipper Clutch enables light clutch lever operation and reduces back-torque when downshifting
- * Electronic Throttle Valves achieve smooth, natural throttle response and the engine’s power delivery characteristics

* Homologated figure measured under fixed conditions. Figure may vary depending on environment. May not apply to every unit.

Chassis

- * Newly designed trellis frame that ensures a balance of easy manoeuvrability at low and medium speeds, and stability at high speeds
- * Optimised dimensions contribute to both light and stable handling
- * SHOWA SFF-BP front fork with excellent shock absorption and damping characteristics making it easy to grasp road surface conditions
- * SHOWA rear suspension with smooth action and excellent damping characteristics
- * Brembo M4.32 front brake calipers boasting strong braking power and excellent controllability

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Electronic Control Technology

- * Integrated Riding Modes, which link KTRC and Power Mode to simplify setting adjustments
- * Bosch IMU, which monitors chassis orientation and provides feedback to enable even more precise management by the KTRC and KIBS systems
- * KTRC (Kawasaki Traction Control), which optimises traction in a wide variety of riding situations
- * Power Mode Selection, which offers three output modes for riders to choose according to preference and conditions
- * KCMF (Kawasaki Cornering Management Function) oversees traction and braking management
- * KIBS (Kawasaki Intelligent anti-lock Brake System), uses high-precision control to regulate hydraulic brake pressure to minimise interference during sporty riding
- * KLCM (Kawasaki Launch Control Mode), which helps to achieve efficient acceleration from a stop
- * KQS (Kawasaki Quick Shifter), which enables clutchless gear shifts
- * Electronic Cruise Control, which enables cruising at a set speed

Design & Equipment

- * SUGOMI design suggests the fierce character of a Kawasaki Supernaked
- * Minimalist design shows functional parts simply and without decorative flourishes
- * Inherent form of a Supernaked is ideal for emphasising the supercharged engine
- * Ram Air intake is another key reminder that this model is powered by a supercharged engine
- * All-LED lighting
- * Upright riding position contributes to both control and comfort
- * Instrument panel displaying various vehicle information
- * Handle switches consolidate controls for function displays and mode settings
- * Smartphone connectivity via Bluetooth

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Engine

Manageable Power Delivery at All Speeds Thoroughly Pursued to Achieve A Power Unit that Enables You to Experience the High Output of 200 PS



When displacement is increased in order to gain more power, this usually results in increased size and weight, which diminishes the merit of any power gained. The Supernaked Z H2 eliminates this problem by using a supercharged engine. The liquid-cooled DOHC 16-valve 998 cm³ In-Line Four Balanced Supercharged Engine generates a high maximum power of 147 kW (200 PS)*, while also being lightweight and compact. It produces intense acceleration unlike anything a naturally aspirated engine can provide.

* Homologated figure measured under fixed conditions. Figure may vary depending on environment. May not apply to every unit.

Balanced Supercharged Engine for a Supernaked

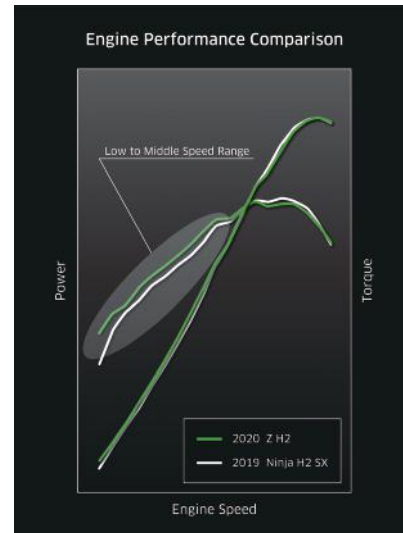
The Z H2's Balanced Supercharged Engine is the product of Kawasaki Group technology, designed in-house not only by the Motorcycle & Engine Company, but also with collaboration from the Aerospace Systems Company, Energy System & Plant Engineering Company, and Corporate Technology Division. Kawasaki wanted the power of its supercharged engine to be manageable. As a result of this pursuit, the optimised engine-supercharger pairing offers smooth power delivery in all conditions, its wide power band delivering exhilarating acceleration at all rpm.

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Low-Mid Range-Focused Torque Facilitates Control

The Electronic Throttle Valves and FI settings are the prime contributors in ensuring the massively powerful supercharged engine has an easy-to-control character. In addition, short final gearing and optimised valve timing help realise smooth acceleration at low-mid rpm, and longer header pipes in the chamberless exhaust system further contribute to low-mid range performance.

While easy-to-manage throttle response and smooth acceleration are prioritised in the torqueful low-mid range, once the rider opens the throttle and the revs climb to high rpm, the power of the supercharged engine becomes readily apparent.



Thorough Weight Reduction and Compactness

Like on the Ninja H2, high supercharger efficiency means that an intercooler is not required. Although automotive engines with superchargers typically have separate lubrication systems, but Kawasaki's supercharged engines use a single lubrication system to provide cooling oil for the engine components, supercharger and transmission. This allows the elimination of duplicate parts like oil pumps, contributing to weight reduction. Furthermore, each engine part has been thoroughly evaluated to minimise weight and size.

Engine Boasting High Precision and High Durability

One of the keys to achieving the Z H2's impressive power is its ø69 mm impeller. Formed from a forged aluminium block using a 5-axis CNC machining centre to ensure high precision and high durability, its complex shape features 6 blades at the tip, expanding to 12 blades at the base. To withstand high pressures and high temperatures not found in a naturally aspirated engine, cast pistons were selected. Cast pistons offer better strength than forged pistons for the very high temperatures generated by the supercharged engine. A unique casting process, which sees unnecessary material removed and hollows created to achieve the ideal thickness, enables a light weight on par with forged pistons, promoting smooth transition from low to high rpm. The cylinders have more precise circularity and cylindricity thanks to the use of a dummy head during the honing process, which allows low-tension piston rings that help minimise mechanical loss. Using a composite manufacturing method, the exhaust valves are made of two types of metals: an inconel material with excellent heat resistance and heat-resistant steel.

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Intake Chamber with Enhanced Intake Characteristics

The intake chamber is made of an aluminium alloy, which offers excellent heat dissipation, and is able to handle the supercharged air pressure (approximately 2 atm). A diffuser and net located at the intake chamber inlet help to smooth intake airflow, and contributes to overall supercharger efficiency, which helps prevent engine knocking even without an intercooler.



Ram Air Intake with Maximised Intake Efficiency

The frontal area of the Ram Air intake is about 3x the area of the supercharger entrance. The Ram Air duct was designed to take the fresh air to the supercharger in as straight a line as possible, contributing to high performance. Positioning the air cleaner just inside the Ram Air intake helps to achieve the ideal power characteristics for the Z H2, while allowing the supercharger housing to be prominently displayed.



Electronic Throttle Valves

Electronic Throttle Valves enable the ECU to control the volume of both the fuel and the air delivered to the engine. Ideal fuel-air mixture results in smooth, natural engine response and the ideal engine output. The system also contributes to reduced emissions. Further, being able to control intake air also enables more precise control of KTRC (Kawasaki Traction Control).

Chamberless Exhaust System

With upcoming EURO 5 emission regulations in mind, a newly designed exhaust system features a layout without an exhaust pre-chamber. This makes room for a large catalyser and a long collector section where exhaust gases from each cylinder can mix well. The long collector greatly contributes to low-mid range torque – a key feature of this model, while the silencer was kept as small as possible despite the lack of pre-chamber, greatly contributing to weight reduction of the exhaust system.



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Cooling System Designed for Stable Operation at High Output

Coolant passages in the cylinder head ensure ideal cooling for the combustion chamber. Designing the engine parts, supercharger, and transmission to all be cooled by engine oil helped realise a compact engine with a simple structure. Oil jets lubricate the supercharger chain at the contact points (two places) where the chain meets the upper and lower gears. In addition to the two oil jets, the supercharger drive train’s lower gear has an oil passage. Centrifugal force draws oil out to lubricate and cool the chain and gear. Inside the engine, each of the four pistons has a dedicated oil jet, ensuring even cooling of the pistons. Transmission oil jets enable a compact transmission with high durability: one jet for every gear mesh position, and a jet for each of the dog-ring engagement positions ensure efficient cooling.

In addition, a liquid-cooled oil cooler helps to ensure the cooling performance required for the high-performance engine, maintaining stable operation even during high output. The large, curved radiator flows a large volume of air aided in part by the design of the radiator shrouds, which help to discharge the heated air. As a result, in spite of the high engine output of 200 PS*, only one radiator fan is needed, which also contributes to weight reduction.

* Homologated figure measured under fixed conditions. Figure may vary depending on environment. May not apply to every unit.

Dog-Ring Transmission

Developed based on feedback from the Kawasaki Racing Team, the dog-ring transmission has a special structure where the gears all stay in place. Only the dog rings move, sliding into position to engage the desired gear. Since the dog rings are much lighter in weight than the gears, the shifting effort is lighter and the shift touch is also good, enabling a shorter shift time, which facilitates quick acceleration.

Assist & Slipper Clutch

The assist cam reduces the clutch spring load for lighter clutch lever operation, which helps reduce rider fatigue in city riding situations like stop & go traffic or traffic jams. The slipper clutch relieves pressure from back-torque to help prevent the rear tyre from hopping and skidding when downshifting.

Engine Sound Tuning

Kawasaki’s accumulated knowledge of acoustic analysis was used to fine-tune the shape of the intake duct to highlight operating sound of the supercharger and tune the intake sound. The result is a unique and emotional engine sound that can only be heard on the Z H2 with its supercharged engine.



Chassis

Specially Designed Lightweight Trellis Frame Offers Both Light Handling and Straight Line Stability

Able to harness the full power of the supercharged engine, the Z H2's specially designed frame offers a combination of high-speed stability and light handling that facilitates control when riding in the city or on twisty roads – seemingly contrary characteristics. The compact frame, an ideal basis for the form of a naked model, has a high-level balance of stiffness and flexibility, allowing a wide range of riding situations to be tackled.

The trellis frame combines pipes of high-tensile steel, each with carefully selected diameter, thickness and bend to obtain the necessary stiffness for that part of the frame. The result is a frame with both the rigidity to handle the high power of the supercharged engine and stresses at high speed, and the flexibility to deliver light, nimble handling. The optimised rigidity also makes it easier for riders to feel feedback from the road surface, which makes the Z H2 more fun to control. Another benefit is that the frame's open design also helps effectively dissipate heat generated by the supercharged engine more easily than would a typical aluminium frame.

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Engine and Swingarm Mounting Plate

The Swingarm Mounting Plate is fastened to the back of the engine, with the swingarm pivot shaft passing through the plate, essentially allowing the swingarm to be mounted directly to the engine. In addition, the Swingarm Mounting Plate acts as a cross member in the frame, contributing to rigidity and enabling weight reduction of the frame. The engine is mounted at an almost upright angle, contributing to the optimised position for the bike's centre of gravity, which gives easy and direct handling.



Dimensions Chosen for Excellent Turning Characteristics

Complementing the supercharged engine's manageable low-mid range power delivery, the chassis design was carefully considered to ensure excellent turning characteristics at low and medium speeds. Caster angle, fork offset and wheelbase were all carefully selected to ensure the ideal dimensions to deliver the light handling for which Kawasaki's Z Supernaked models are renowned. The chassis rigidity, optimised centre of gravity, carefully crafted riding position, and suspension settings able to accommodate low- though high-speed riding all contribute to the Z H2's nimble turning character as well as its excellent straight-line stability at high speed.

Front Fork

For this model, SHOWA's SFF-BP front fork is used. The fork's large-diameter piston provides firm bottoming resistance and sporty damping characteristics. Adjustable preload and damping allow riders to easily set up the bike according to their size and the riding conditions.



Rear Suspension

New Uni Trak rear suspension and swingarm feature a SHOWA shock absorber unit. It offers excellent suspension action at all speeds, as well as firm bottoming resistance even under heavy loads.

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Swingarm

Absolute manoeuvring stability is essential to achieve stability at all speeds as well as light, nimble handling. This requires a swingarm with sufficient rigidity, so technology from the Ninja ZX-10RR, which can be seen at race tracks around the world, was sourced. The double-sided swingarm, like those used on our supersport models, offers both high rigidity and light weight.



Brake System

To be easy to ride at low and medium speeds, as well as high speeds, the Z H2 needed brake system that matches its performance. The front brakes are gripped by Brembo M4.32 monobloc calipers. Machined from cast aluminium blocks, their highly rigid one-piece structures boast strong braking force. The calipers are radially mounted, further contributing to their high performance. The Nissin master cylinder, fine-tuned with Kawasaki original settings, offers functionality perfectly matched to the Z H2's character, enabling riders to not only control deceleration from various speed ranges, but also to use the brakes to initiate weight transfer to change the bike's posture on corner entry.



Advanced Electronic Systems that Support Vehicle Control

The Z H2's advanced electronics package includes numerous electronic control systems such as KTRC, KCMF, and KIBS, as well as an IMU that provides chassis orientation feedback to KIBS and KTRC. These rider-support systems offer the peace of mind to handle the power of the supercharged engine, while providing a wide range of information. In addition, Electronic Cruise Control and QQS further enhance riding convenience. In addition, a choice of three Power Modes, and integrated Riding Modes that link KTRC and Power Mode are extremely easy to operate, allowing riders to focus on their ride.

Integrated Riding Modes: Sport, Road, Rain, Rider (Manual)

All-inclusive modes that link KTRC and Power Mode allow riders to efficiently set traction control and power delivery to suit a given riding situation.

Riders can choose from three settings (Sport, Road, Rain) or a manual setting (Rider). In the manual Rider mode, each of the systems can be set independently.



•Three Selectable Settings

Sport: enables riders to enjoy sporty riding on winding roads.

Road: offers comfortable riding over a wide range of situations, from city riding to highway cruising and rural roads.

Rain: offers rider reassurance when riding on a wet road surface.

The riding mode can be changed while riding, using the button the left handle.

Enhanced Chassis Orientation Awareness: Bosch IMU (Inertial Measurement Unit)

The use of Bosch's compact IMU allows an additional layer of precision to be added to the already high-level KTRC, KLCM and KIBS base systems. IMU enables inertia along 6 DOF (degrees of freedom) to be monitored. Acceleration along longitudinal, transverse and vertical axes, plus roll rate and pitch rate are measured. The yaw rate is calculated by the ECU using Kawasaki original software.

The additional feedback from the IMU gives an even clearer real-time picture of chassis orientation than Kawasaki's sophisticated programming is able to predict on its own.

In addition to more precise management, feedback from the IMU enables KIBS to incorporate an additional function. Corner braking management assists riders in tracing their intended line through the corner.

Bosch's latest IMU is highly compact and very lightweight, weighing only 40 g.

KTRC (Kawasaki Traction Control)

Three modes cover a wide range of riding conditions, offering either enhanced sport riding performance or the peace of mind under certain conditions to negotiate slippery surfaces with confidence.

Riders can choose from three modes. Mode 1 prioritises forward acceleration. Mode 2 offers a balance between acceleration performance and rider reassurance. Mode 3 provides rider reassurance by facilitating smooth riding on slippery surfaces. Riders may also elect to turn the system off.

In Mode 1, highly sophisticated programming allows a degree of slip – a certain amount of slip is required to maximise acceleration. The ideal slip ratio varies according to conditions. The system looks at a number of parameters to get an accurate real-time picture of what is going on: front and rear wheel speed (slippage) and various engine, machine and rider input parameters are monitored.

Because the sophisticated software bases its dynamic analysis on the chassis' orientation relative to the track surface (rather than relative to a horizontal plane), it is able to take into account corner camber, gradient, etc, and adapt accordingly – even without input from the IMU.

Using complex analysis, the system is able to predict when traction conditions are about to become unfavourable. By acting before slippage exceeds the range for optimal traction, drops in power can be minimised, resulting in ultra-smooth operation.

The system confirms conditions every 5 milliseconds and uses ignition cut and airflow control (via the Electronic Throttle Valves), enabling extremely quick reaction times.

In Modes 2 and 3 (each progressively more intrusive) the same logic and control as in Mode 1 is employed during normal operation. However, when excessive rear wheel spin is detected, ignition timing is retarded and engine output is reduced to allow grip to be regained. Fine control results in a very natural feeling: engagement, on/off transition and extended operation are all smooth.

In Mode 3 (the most intrusive), KTRC assists riders in negotiating both short challenging patches (train tracks or manhole covers) and extended stretches of bad road (wet pavement, cobblestone, gravel) with confidence. Wheel spin is also limited when starting on a low-traction surface.

KTRC conveniently remembers which mode was selected, so when the engine is started the mode will be the same as when the engine was turned off. The system will reset to Mode 1 if the system had been turned off, requiring the rider to consciously turn KTRC off via the switch at the left handle.

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Power Mode Selection

In addition to Full power mode, there are two additional modes (Middle, Low), allowing riders to select power delivery to suit preference and conditions.

Full: Full power operation
Middle: Limited output (about 75% of full)
Low: Limited output (about 50% of full)



KCMF (Kawasaki Cornering Management Function): Total Engine & Chassis Management Package

The strength of Kawasaki's cutting-edge electronics has always been the highly sophisticated programming that, using minimal hardware, gives the ECU an accurate real-time picture of what the chassis is doing. Kawasaki's proprietary dynamic modelling program makes skilful use of the magic formula tyre model as it examines changes in multiple parameters, enabling it to take into account changing road and tyre conditions. Using the latest evolution of Kawasaki's advanced modelling software and feedback from a compact Bosch IMU (Inertial Measurement Unit), KCMF monitors engine and chassis parameters throughout the corner – from entry, through the apex, to corner exit – modulating brake force and engine power to facilitate smooth transition from acceleration to braking and back again and to assist riders in tracing their intended line through the corner.

KCMF oversees the following systems:

- **KTRC** (including traction management and wheel lift management)
- **KLCM** (including traction management from starts, and wheel lift management)
- **KIBS** (including pitching management and corner braking management)

KIBS (Kawasaki Intelligent anti-lock Brake System)

KIBS, Kawasaki's original brake management system, uses high-precision control to regulate hydraulic brake pressure. During sports riding, it provides linear braking characteristics, enabling effective and stable braking with minimal intervention. When the brakes are applied while turning, KIBS' highly advanced hydraulic control is used to modulate brake force to assist riders trace their intended line through the corner.

KIBS is a multi-sensing system, using the input from numerous sources. In addition to front and rear wheel speed sensors (standard for any ABS system), KIBS also monitors front caliper hydraulic pressure and various information from the engine ECU (throttle position, engine speed, clutch actuation and gear position).

High-precision brake pressure control enables the system to avoid reduced brake performance due to excessive pressure drops, this allows lever feel to be maintained when KIBS is active and ensures ABS pulses feel smooth (not heavy).

High-precision brake pressure control also offers a number of sport riding benefits:

1. **Rear lift suppression**
2. **Minimal kickback during operation**
3. **Accounting for back-torque**

When braking from high speeds, the rear may lift as weight transfers forward. By monitoring front caliper hydraulic pressure, KIBS is able to regulate pressure increases, reducing the tendency of the rear to lift. This happens in two situations:

- 1) Before conditions require ABS intervention, KIBS prevents the pressure from increasing too quickly, thus suppressing rear lift, and 2) after ABS has decreased pressure to prevent wheel lock, KIBS pressure is not returned too quickly, preventing a sudden increase that could induce rear lift. Limiting this tendency contributes to enhanced braking stability.

Precise control of front caliper pressure also enables KIBS to minimise kickback during operation. Pressure is increased in small amounts and slips are minimised, resulting in a very smooth operation feeling. This of course translates to minimal distraction to the rider during sport riding. By accounting for back-torque, KIBS is able to offer increased rear brake control during downshifts. KIBS parameters include throttle position, clutch actuation and gear position, allowing the system to recognise engine back-torque from downshifting or getting off the gas at high rpm. Rear wheel slip due to engine braking often triggers ABS action on standard systems, but by preventing unnecessary ABS intervention in these situations, KIBS leaves management of the rear brake in the hands of the rider.

With feedback from the IMU, KIBS is able to incorporate an additional function: corner braking management. Should riders use the brakes beyond the entrance to a turn (i.e. trail braking) or mid-corner (e.g. to avoid an obstacle), brake force is modulated to assist riders in tracing their intended line through the corner instead of running wide.

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KLCM (Kawasaki Launch Control Mode)

Designed to assist the rider by optimising acceleration from a stop, KLCM electronically manages engine output to minimise wheelspin and wheel lift when launching. KLCM should only be used under closed-course conditions; do not use KLCM during everyday riding.

With the clutch lever pulled in and the system activated, engine speed is limited to 6,250 min⁻¹ – even with the throttle held open.

Once the clutch lever is released to engage the clutch, engine speed is allowed to increase, but power is regulated to minimise wheelspin and help keep the front wheel on the ground.

The system disengages automatically at 150 km/h or when the rider shifts into 3rd gear.

KQS (Kawasaki Quick Shifter)

At engine speeds (rpm) above 2,500 min⁻¹, KQS enables clutchless upshifts and downshifts. Complementing the powerful engine and dog-ring transmission, the quick shifter is a convenient feature that can be used not only for sports riding but also for city riding and touring. It enables quick upshifts and downshifts, facilitating smooth acceleration and deceleration.

During acceleration, the system detects that the shift lever has been actuated, and sends a signal to the ECU to cut ignition so that the dog-rings can smoothly engage the next gear without having to use the clutch.

During deceleration, the KQS system automatically controls engine speed, allowing you to downshift without operating the clutch.

The system uses a contactless-type sensor, contributing to its high reliability.



Electronic Cruise Control

Kawasaki's cruise control system allows a desired speed to be maintained with the simple press of a button. Once activated, the rider does not have to constantly apply the throttle. This reduces stress on the right hand when travelling long distances, enabling relaxed cruising and contributing to a high level of riding comfort.



Operation of the Electronic Cruise Control is conveniently activated from the left handle.

Once the desired speed has been selected, engine output is adjusted automatically via the Electronic Throttle Valves to maintain speed when ascending or descending grades are encountered. The set speed can be adjusted using the "+" and "-" buttons.

Operating the brake lever, clutch lever or rear brake pedal, or shifting gears causes the Electronic Cruise Control to be disengaged. Closing the throttle beyond the "zero-throttle" position is another instinctive way to disengage the system.

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Design Concept: SUGOMI & Minimalist Styling for a Next-Generation Naked



The styling of the Z Series flagship Z H2 was shaped according to its SUGOMI & Minimalist design concept. Its dynamic crouching form, which calls to mind a predator poised to attack, and the asymmetric Ram Air intake on its left side are elements of its fiercely intense and highly individualistic SUGOMI design. Its compact chassis is the product of a minimalist design philosophy, with all functional parts shown simply, without flourish, and made as small as possible. Conversely, the prominent display of the new steel trellis frame its aluminium pivot plate only underscores their importance – both functionally and as styling elements. Finally, when discussing the Z H2's styling, the significance of the Kawasaki River Mark emblem displayed on the headlamp cowl should not be forgotten. Its use, an honour permitted only for machines powered by supercharged engines, confirms the Z H2 as a flagship model.

SUGOMI Design

SUGOMI describes the unique aura that radiates from beings possessing overwhelming presence and unrivalled power. It is like the almost palpable energy of a hunting predator intently focused on its prey, its low-crouching form poised to attack, every muscle tensed in anticipation of exploding into action. Its fierce glare pins its prey in place, and we glimpse of sharp fangs. Looking over the body of the Z H2, you will discover that this design concept has been faithfully recreated.

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Asymmetric Design

While the asymmetrical design of the Ram Air intake duct running along the left side of the chassis was dictated by the requirements of the supercharged engine, it is the perfect complement to the Z H2's fierce SUGOMI design.

In actual fact, only the intake duct and the under cowl – another product of functional necessity – are asymmetrical; all other aspects represent accurate symmetry. This gives the Z H2 a well-balanced and highly harmonious design.

Making the supercharger housing visible from the outside was an intentional layout decision. It only works because a naked model is not covered with full-body fairings.

But rather than fully exposing it for easy viewing, offering only glimpses of the supercharger housing from between the pipes of the frame is a more impressive expression of the fact that the Z H2 is a Supernaked model with a supercharged engine.



All-LED Lighting

All the lights – including the headlamp, taillight as well as turn signals and license plate lamp – are equipped with LED bulbs. Low power consumption and high durability improve maintainability while providing high-light intensity and high illumination. The light's vivid colouring contributes to excellent visibility from the surroundings, significantly contributing to enhanced night riding safety. The frame mounted headlamp also influences the styling around the front and creates an innovative look that is different from previous naked models.



Riding Position

An upright handlebar and seat with an optimised base plate and cushion thickness create a relaxed riding position that does not restrict the rider. The ample freedom of movement offered by the riding position, and low vibration make riding pleasant and comfortable.

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Instrument Panel

The instrument panel comprehensively displays various information on the full-colour TFT LCD screen. It also has functions that can help you manage daily vehicle operating status and schedule for long distance riding. Display functions include a digital speedometer, gear position indicator, shift indicator, odometer, dual trip meters, fuel gauge, remaining range, current/average fuel consumption, outside temperature, coolant temperature, clock, Economical Riding Indicator, IMU indicator, KIBS indicator, boost pressure and boost temperature.



Fat-Type Handlebar and Handle Switches

Mounted on the strong, supple fat-type handlebar, left and right handle switches let riders make setting and display changes without releasing the grips. The left handle switch is used to operate the Electronic Cruise Control, make meter display changes, and update settings, while the right handle switch is used to access to the machine setting menus.



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Smartphone Connectivity

This model is equipped with a smartphone connectivity function, which enables connection via Bluetooth. Since the system can be accessed via Bluetooth technology, there is no need to connect cables, which means that convenience is dramatically improved. In addition to checking machine information and recording and downloading logs, settings such as Riding Mode can be prepared remotely.

A Bluetooth chip built into the instrument panel enables riders to connect to their motorcycle wirelessly. Using the smartphone application “RIDEOLOGY THE APP,” a number of instrument functions can be accessed, contributing to an enhanced motorcycling experience.

Vehicle Info:

information such as fuel gauge, odometer, maintenance schedule, etc can be viewed via the smartphone.

Riding Log:

GPS route information as well as vehicle running information can be logged and viewed via the smartphone.

Telephone notices:

when a call or mail is received by the smartphone, this is indicated on the instrument display.

Tuning – General Settings:

general instrument display settings (such as preferred units, date, date format, etc) can be adjusted via the smartphone.

Tuning – Kawasaki Riding Management:

Riding Mode (Road, Sport, Rain, Rider) can be set in advance on the smartphone and uploaded when in proximity of the bike, as can riding support systems (like KQS).

The information available in “RIDEOLOGY THE APP” includes odometer, hour metre, trip A, trip B, fuel gauge, cruising distance, average fuel consumption, average speed, max lean angle (right/left), Kawasaki service reminder (set by the dealer), oil change reminder (set by the rider), plus an additional rider-selectable reminder.

Detailed riding logs including GPS information and vehicle riding information can also be recorded and viewed. While riding, the app continuously tracks vehicle speed, engine speed (rpm), gear position, throttle position, front brake fluid pressure, vehicle acceleration/deceleration, current fuel consumption, and coolant temperature. Once the riding log is saved, the rider can see this information in a graphical display. The app can also display a ride summary, with information that may include: route travelled, total distance, total time, gas mileage (best/average), speed (best/average), max lean angle (right/left), etc. In the graphical display mode, riders can choose which information they want to display. In both the graphical display mode and the riding overview display mode, the information display order can also be changed according to the rider's preference.

When riding (with the app ON*), the bike and smartphone are always connected. When the ignition is turned off, the latest vehicle information and settings are stored by the app and may be viewed on the smartphone. Any Kawasaki Riding Management changes made via the app while the engine is off, or while out of range, cannot be uploaded until the ignition is turned on and the smartphone is in range with the app ON. General settings can only be updated via the app when the bike and smartphone are connected.

*While RIDEOLOGY THE APP needs to be ON (running in the background) to be connected to the bike, it was not intended to be operated while riding. Rider interaction with the app should be limited to when the vehicle is not being operated and it is safe to do so.

An app function enables the clock on the instrument display to be updated automatically when the bike and smartphone are connected.

Concept and Overview	Feature Guide	Engine	Chassis	Electronic Control Technology	Design and Equipment	Specifications
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METALLIC SPARK BLACK / METALLIC GRAPHITE GRAY / MIRROR COATED SPARK BLACK



METALLIC DIABLO BLACK / METALLIC FLAT SPARK BLACK



METALLIC MATTE CARBON GRAY / METALLIC FLAT SPARK BLACK



Concept and Overview	Feature Guide	Engine	Chassis	Electronic Control Technology	Design and Equipment	Specifications
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Z H2

ENGINE

Type	Liquid-cooled, 4-stroke In-Line Four
Displacement	998 cm ³
Bore and Stroke	76.0 × 55.0 mm
Compression Ratio	11.2:1
Valve system	DOHC, 16 valves
Fuel system	Fuel injection
Intake system	Kawasaki Supercharger
Ignition	Digital
Starting	Electric
Lubrication	Forced lubrication, wet sump with oil cooler

DRIVETRAIN

Transmission	6-speed, return, dog-ring
Final drive	Chain
Primary reduction ratio	1.480 (74/50)
Gear ratios: 1st	3.077
2nd	2.471
3rd	2.045
4th	1.727
5th	1.524
6th	1.348
Final reduction ratio	2.556 (46/18)
Clutch	Wet multi-disc, manual

Z H2

FRAME

Type	Trellis, high-tensile steel
Wheel travel: front	120 mm
rear	134 mm
Tyre: front	120/70ZR17 M/C 58W
rear	190/55ZR17 M/C 75W
Rim size: front	17M/C × MT3.50
rear	17M/C × MT6.00
Caster (rake)	24.9°
Trail	104 mm
Steering angle (left/right)	29°/29°
Suspension: front	Telescopic
rear	Swingarm (New Uni Trak rear suspension)
Brakes: front	Dual ø290 mm discs
rear	Single ø226 mm disc

DIMENSIONS

Overall length	2,085 mm
Overall width	810 mm
Overall height	1,130 mm
Wheelbase	1,455 mm
Ground clearance	140 mm
Seat height	830 mm
Curb mass	239 kg
Fuel capacity	19 litres

PERFORMANCE

Maximum power	147.1 kW {200 PS} / 11,000 min ⁻¹
Maximum Torque	137.0 N·m {14.0 kgf·m} / 8,500 min ⁻¹