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NEW MODEL PRESS RELEASE

2024 KAWASAKI Z7 HYBRID ABS MOTORCYCLE CHANGE THE GAME

In a commitment to carbon neutrality and pursuit of innovative mobility solutions, Kawasaki has been at the forefront of shaping the future of transportation. Following the introduction of electric vehicle (EV) models like the Ninja® e-1 and Z e-1, Kawasaki proudly presents a groundbreaking addition to its lineup—the world's first *strong hybrid* supernaked motorcycle, the all-new Z7 Hybrid ABS.

This revolutionary model is born from a vision of creating a versatile motorcycle that seamlessly transitions between the roles of a fuel-efficient city commuter, an exhilarating weekend ride, and a silent, zero-emission vehicle suitable for restricted areas. The unique power unit of the Z7 Hybrid ABS combines a 451cc parallel-twin internal combustion engine (ICE) with a compact traction motor, promising a host of new riding experiences, including instant acceleration rivaling 1,000cc-class supersport models, excellent fuel economy, and the convenience of button-shift sport riding. With three distinct drive modes (SPORT-HYBRID, ECO-HYBRID, and low-speed short-distance EV), the Z7 Hybrid ABS is designed to cater to a wide range of riding situations, promising an exciting and adaptable riding experience.



Beyond its innovative power unit, the Z7 Hybrid ABS motorcycle is engineered to excel during in-town riding scenarios, featuring conveniences such as idling stop and the Automatic Launch Position Finder (ALPF) for seamless stop-and-go traffic maneuvering. The hybrid power unit's ample torque contributes to a rider-friendly character, while the absence of a clutch lever facilitates low-speed maneuvers like U-turns. The motorcycle further benefits from WALK Mode, offering enhanced assistance for parking lot maneuvers. The lightweight trellis frame accommodates the additional components required for the hybrid power unit without compromising the sporty handling characteristic that Kawasaki motorcycles are renowned for. The rider interface of the Z7 Hybrid ABS, from its relaxed sporty riding position to the intuitive switchgear layout, has been crafted to inspire confidence and ease of use. The motorcycle boasts a full-color TFT instrumentation with smartphone connectivity, enhancing the overall riding experience. The Z7 bike's aesthetic marries the clean, high-class image of a hybrid machine with the aggressive and distinctive presence of the Z series, creating a futuristic image in silver and lime green with a semi-matte finish.

2024 Z7 HYBRID ABS HIGHLIGHTS

- Strong hybrid power unit
- Three drive modes: three riding experiences
- E-boost: increased performance and liter-bike-level acceleration
- WALK Mode with reverse
- 6-Speed automated manual transmission
- Automatic Launch Position Finder (ALPF)
- Idling stop function
- Zero emissions, quiet running
- Sporty Kawasaki handling
- Aggressive Z supernaked styling
- All LED lighting
- Futuristic hybrid design
- Full-color TFT instrumentation with smartphone connectivity

POWER UNIT

The Z7 Hybrid ABS motorcycle showcases an innovative and powerful hybrid power unit, marking a significant milestone in motorcycle technology. At its core is a compact traction motor strategically mounted behind the cylinder bank of a 451cc liquid-cooled parallel-twin internal combustion engine (ICE). This hybrid setup, a first* in the motorcycle world, results in a potent combination that seamlessly blends the strong low-mid torque of the traction motor with the performance characteristics of the ICE. The 451cc engine, achieved through a bore and stroke of 70.0mm x 58.6mm, delivers a well-balanced and rider-friendly character, with engine tuning optimized for robust low-end torque that extends throughout the high-rpm range.

The ICE boasts a range of advanced features contributing to its performance, including a downdraft intake for efficient cylinder filling, left and right intake funnels of varying heights for smooth response, and Electronic Throttle Valves (ETV) with 36mm throttle bores for precise control. Fine-atomizing injectors with a droplet size of 60 microns enhance combustion efficiency, while Denso stick-type ignition coils minimize electrical interference. The engine's components, such as long-reach iridium spark plugs, well-sized intake and exhaust valves, and lightweight pistons with oil jets for cooling, work in harmony to optimize high-rpm performance and overall efficiency.

The hybrid power unit also incorporates Kawasaki's first Integrated Starter Generator (ISG), situated at the end of the engine's crankshaft. The ISG serves the dual function of a starter motor and generator, contributing to space conservation. A fully machined balancer shaft minimizes engine vibration for comfortable cruising, while the exhaust system with 31.8mm header pipes enhances high-rpm performance. The unit features two radiators and a liquid-cooled oil cooler for effective cooling, and a meticulously designed heat management system ensures rider comfort by directing hot air away from the rider.

The electric vehicle (EV) component of the hybrid power unit comprises a compact traction motor powered by a 28.6 lb. 48V lithium-ion battery pack. The traction motor, rated at 7.0 kW (9.0 kW max), is mounted behind the engine's cylinder bank and provides quick response and strong low-end power, contributing to rapid acceleration from a standstill. The battery pack, located beneath the seat, is charged while riding, eliminating the need for external charging. The ISG inverter and DCDC converter

are unitized to conserve space, and the traction motor has its own radiator. The intricate duct layout in the lower cowl ensures optimal heat management for both the ISG and battery pack components. The oil pump, driven off the transmission's input shaft by one-way clutches, further contributes to space efficiency and operates independently of the engine, enhancing overall functionality. The result is a robust and innovative hybrid power unit that defines the Z7 Hybrid ABS's performance and sustainability.

The Z7 Hybrid ABS motorcycle incorporates a regenerative system that efficiently recycles the energy generated during deceleration back to the battery when the rider rolls off the throttle. This thoughtful design not only enhances the overall sustainability of the motorcycle but also extends the cruising range by harnessing the energy that would otherwise be lost. As the batteries approach full charge, the regenerative function gradually tapers off, optimizing the efficiency of energy capture and storage for an eco-conscious and prolonged riding experience.

TRANSMISSION AND CLUTCH

The Z7 Hybrid ABS features Kawasaki's unique electronically controlled 6-speed transmission, incorporating proprietary logic to manage smooth gear shifts and hydraulic clutch operation. This innovative system allows riders to choose between different drive modes, offering full automatic operation (EV Mode), manual button-shift (SPORT-HYBRID), or customization based on the rider's preference (ECO-HYBRID). The absence of a traditional clutch lever and shift pedal simplifies low-speed maneuvers, very low speed riding, and navigating heavy stop-and-go traffic, providing greater ease of use.

The gear pattern of the 6-speed transmission is N-1-2-3-4-5-6, and the electronic control unit (ECU) seamlessly manages engine and motor speed during upshifts and downshifts, ensuring an exceptionally smooth and natural shifting feel. In manual mode (MT), the rider utilizes shift buttons on the left handlebar – a finger switch for upshifts and a thumb switch for downshifts. Alternatively, in automatic mode (AT), the gears are shifted by the bike itself, with the ECU prioritizing fuel economy in determining shift timing. The transmission offers a unique feature in ECO-HYBRID Mode, allowing manual shifting according to the rider's intended timing, effectively transitioning the transmission to manual operation. The engagement and disengagement of the hydraulic clutch, actuated by a dedicated oil pump, are seamlessly controlled by the ECU, ensuring optimal performance during gear changes and when the bike is stationary. Additionally, the rider has the option to select Neutral deliberately by shifting down when the bike is stopped, as the clutch remains disengaged during normal operation.

DRIVE MODES

The Z7 Hybrid ABS motorcycle offers riders a dynamic range of riding experiences through its three distinct drive modes: SPORT-HYBRID, ECO-HYBRID, and EV Mode. Each mode is designed to cater to various riding situations, providing riders with versatility and stimulating elements to explore.

In SPORT-HYBRID Mode, riders can unlock the full potential of the hybrid power unit's two-drive-system propulsion. This mode is tailored for sport-riding enthusiasts, delivering a sporty response with the engine operating at full power consistently. The e-boost is available, enhancing acceleration, and riders have the option for manual transmission (MT) operation, adding an extra layer of control for those who prefer a hands-on approach.

ECO-HYBRID Mode is focused on fuel efficiency and environmentally conscious riding. The traction motor is used alone when moving off from a start, with the engine seamlessly coming online at around 2,000 rpm, transitioning from electric vehicle (EV) to hybrid electric vehicle (HEV) power. When the motorcycle is stationary, the engine turns off to conserve fuel. ECO-HYBRID Mode features an idling-stop function, excluding the e-boost, and provides riders with the choice of selecting between manual transmission (MT) and automatic transmission (AT).

EV Mode is a low-speed, short-distance mode that prioritizes clean, quiet, and zero-emission operation. Ideal for situations where quiet riding is essential, such as in residential areas or parking garages, EV Mode utilizes traction motor-only operation and automatic transmission (AT) functionality, limited to gears 1st-4th, for low-speed, short-distance operation.

Riders can seamlessly transition between these modes while riding using the dedicated buttons on the left handle—HEV/EV, SPORT, and ECO. However, when switching from HEV to EV, specific conditions must be met: the transmission must be in 4th gear or lower, and the speed must be less than 15 mph. This user-friendly system allows riders to adapt to different riding conditions and preferences, enhancing the overall riding experience on the Z7 Hybrid ABS.

E-BOOST

The Z7 Hybrid ABS motorcycle introduces the innovative e-boost feature, a temporary power boost that elevates the overall output to that of a 650cc-class machine. Exclusive to the SPORT-HYBRID mode, e-boost provides riders with a burst of increased power and torque, enhancing acceleration for an exhilarating riding experience. This feature is accessible at the rider's discretion but with a limitation of 5 seconds per activation.

To engage e-boost, riders must meet specific conditions, such as reaching a minimum speed and opening the throttle past a certain degree. When these criteria are met, the e-boost indicator appears on the instrument display, signaling its availability. Activating the e-boost function is initiated by pressing the dedicated button on the right handle. Once engaged, the gauge changes color from gray to purple, accompanied by a 5-second countdown timer indicated by a shrinking e-boost gauge. During this period, the motorcycle benefits from increased power. Once the countdown timer expires, the e-boost function is disengaged. Importantly, riders have the flexibility to activate e-boost on the fly while riding or when the bike is stationary, allowing for stronger acceleration from a standing start. The system ensures versatility and excitement, demonstrating the capability of the Z7 Hybrid ABS.

AUTOMATIC LAUNCH POSITION FINDER (ALPF)

The Z7 Hybrid ABS is equipped with an Automatic Launch Position Finder (ALPF) feature that enhances the convenience of moving off from a standstill. When the motorcycle comes to a stop, the ALPF automatically returns the transmission to 1st gear, streamlining the process of accelerating again. This function operates seamlessly in manual transmission (MT) mode, while in automatic transmission (AT) mode, the Electronic Control Unit (ECU) takes charge of selecting the suitable gear for the rider. The ALPF system provides riders with a smoother and more user-friendly experience during stops and starts. For those who prefer manual control, the system can be deactivated, and the ALPF indicator will disappear from the instrument screen when turned off, allowing riders to customize their riding experience based on their preferences and situational needs.

WALK MODE WITH REVERSE

The Z7 Hybrid ABS motorcycle is equipped with WALK MODE, offering riders added convenience for maneuvering in parking lots and tight spaces. When specific conditions are met, such as the bike being stationary and the throttle turned off, users can activate WALK MODE by simply pressing and holding the designated button. The screen background changes to orange, clearly indicating the shift into this specialized mode. In WALK MODE, opening the throttle propels the bike forward at a walking speed of approximately 2 mph, facilitating easy and controlled movement in confined areas. Moreover, closing the throttle past the "zero" point seamlessly transitions the bike into reverse, allowing for smooth and controlled backward motion. This innovative feature enhances practicality, making it particularly adept at low-speed maneuvers and providing riders with an extra level of convenience during parking and tight-space navigation.

CHASSIS

The chassis of the Z7 Hybrid ABS draws inspiration from conventional sport motorcycle design principles, strategically organizing the components of its hybrid power unit—comprising the Internal Combustion Engine (ICE), traction motor, battery pack, and Integrated Starter Generator (ISG)—within a lightweight trellis frame. This meticulous arrangement is geared towards achieving the renowned light and nimble handling characteristic of Kawasaki sport motorcycles.

In terms of size, the compact power unit on the Z7 Hybrid ABS is comparable to that of the Z500 motorcycle. The battery pack finds its place beneath the front seat, with the ISG positioned on the left side of the ICE, the ISG inverter/converter located to the left of the cylinder bank, and the Engine Control Unit (ECU) situated in the tail. Deliberate consideration went into the pipe layout of the trellis frame, designed to enhance external shock absorption, thereby contributing to an elevated level of riding comfort. The swingarm pivot area is constructed in a monaka style, featuring a hollow, reinforced box design to bolster rigidity in that region and ultimately contribute to the light and sporty handling. The optimization of chassis geometry and frame rigidity balance culminates in a handling character akin to the Z650, reinforcing the reputation of the Z7 Hybrid ABS for agile and responsive performance.

SUSPENSION

The Z7 Hybrid ABS is equipped with a highly responsive 41mm telescopic fork that ensures exceptional suspension action. The adjustable settings on the fork enable the motorcycle to utilize the full range of its stroke, a key factor in delivering the sporty and agile handling characteristic of the Z7 Hybrid ABS. This thoughtful suspension design aligns with Kawasaki's commitment to providing riders with a dynamic and engaging experience on the road, allowing for precise control and responsiveness.

On the rear suspension, the Z7 Hybrid ABS motorcycle features a New Uni-Trak® suspension system with linkage positioned below the swingarm. This innovative arrangement not only optimizes the bike's handling but also facilitates the strategic placement of the battery pack beneath the front seat. The rear suspension offers adjustable ride height, allowing riders to adjust for their preferences or for carrying a passenger or luggage. The integration of advanced suspension components underscores Kawasaki's dedication to delivering a well-rounded riding experience that combines comfort, performance, and adaptability.

BRAKES AND WHEELS

The Z7 Hybrid ABS motorcycle is equipped with a robust braking system featuring dual 300mm front disc brakes and a 220mm rear disc. This setup not only provides ample braking power but also aligns

with the bike's sporty image. The dual-piston front calipers, master cylinder, and brake pads are meticulously designed components that enhance the brake touch and control, contributing to a superb braking experience. The careful engineering of these elements ensures that riders can confidently modulate the brakes, achieving both precision and responsiveness for a heightened sense of control on the road.

Complementing the effectiveness of the disc brakes, the Z7 Hybrid ABS incorporates front and rear Anti-Lock Brake System (ABS), adding an extra layer of assurance to the braking performance. The ABS system prevents wheel lock-up during hard braking, promoting stability and control in various riding conditions. Moving to the wheels, the Z7 Hybrid ABS boasts stylish star-pattern 5-spoke wheels that not only contribute to the bike's overall light weight but also offer high rigidity to benefit its handling characteristics. Beyond functionality, these wheels contribute to the bike's aesthetic appeal, enhancing its sleek and sporty appearance.

ERGONOMICS

The Z7 Hybrid ABS prioritizes rider-friendly ergonomics, offering a relaxed and sporty riding position that caters to a diverse range of riders. The high and wide handlebars play a crucial role in fostering this comfortable riding stance, optimized to facilitate low- and medium-speed maneuvers and ultimately boost rider confidence. The thoughtful design of the trellis frame and compact power unit contribute to a slim chassis package, accommodating a wide spectrum of riders and ensuring a connected and engaged feel with the motorcycle.

The fuel tank, positioned between the rider's legs, is intentionally slim, promoting optimal contact with the bike. The seat is designed for versatility, allowing flexibility in seating positions to accommodate various rider heights and builds while maintaining the ability to grip the tank with their legs. The 31.3-inch seat height, combined with the seat design and slim chassis, enables riders to comfortably reach the ground with their feet, enhancing overall comfort and confidence. Additionally, the passenger seat is equipped with ample cushioning to prioritize passenger comfort, making the Z7 Hybrid ABS motorcycle a practical choice for two-up riding experiences.

The rider interface is meticulously designed for intuitive and confident operation. The switchgear layout is carefully arranged, placing drive mode selection, MT/AT selection, and shift buttons on the left handle, while the e-boost control is positioned on the right. This strategic layout ensures that riders can enjoy the sporty riding experience on the Z7 Hybrid ABS and utilize its various functions with ease. Overall, the rider-friendly ergonomics of the Z7 Hybrid ABS reflect Kawasaki's commitment to creating a motorcycle that is not only high-performing but also accessible and enjoyable for a range of riders.

STYLING

The Z7 Hybrid ABS boasts a distinctive and compelling styling that harmoniously merges the sharp and aggressive aesthetics of a Z Supernaked bike with the clean and high-class image befitting a hybrid machine. The design emphasizes the motorcycle's street riding potential, exuding a strong and muscular presence that leaves a lasting impression on onlookers. The front cowl proudly features the iconic Kawasaki River Mark, serving as a symbolic testament to the innovative technology integrated into these powerful hybrid motorcycles.

A key focal point of the design of the Z7 Hybrid is its triple headlight unit, which defines its face. The two upper headlights function as low beams, while the single lower headlight serves as the high beam,

strategically designed to draw attention to the dual low beam headlights. The short and muscular shrouds contribute to the distinct Supernaked style, while functional lower cowl ducts not only enhance the dynamic styling but also deliver cool air to the ISG and battery pack. Transparent covers with a honeycomb-ribbed design provide visual accents on the side covers, hinting at the cutting-edge technology within.

The tail cowl of the Z7 Hybrid ABS features elegant lines that envelop the rear of the bike, adding a futuristic touch to the overall design. The LED taillight design enhances the rear's sharp impression, and the inclusion of LED turn signals and a license plate bulb completes the all-LED lighting package. The "Hybrid" logo on the motor covers serves as a distinctive design element, drawing attention to the unique power unit. The motorcycle is offered in silver and lime green with a semi-matte finish, contributing to a fresh and futuristic image that aligns with Kawasaki's commitment to hybrid electric vehicle (HEV) models.

TFT COLOR INSTRUMENTATION

The Z7 Hybrid ABS features a cutting-edge 4.3-inch all-digital TFT color instrumentation that elevates the cockpit's appearance with a high-tech and high-grade aesthetic. The full-color display incorporates Thin-Film Transistor (TFT) technology, ensuring a superior level of visibility and clarity. Notably, the background color of the screen dynamically adjusts from white to black in low ambient light conditions, enhancing readability. Riders have the flexibility to manually set the screen color to black or white based on their preference, and the screen brightness adjusts automatically according to the available ambient light, with two rider-selectable levels for brightness customization.

The TFT color instrumentation of the Z7 Hybrid ABS is feature-rich, providing a comprehensive set of information to the rider. Display functions include a digital bar-style tachometer, e-state indicator, battery temperature gauge, e-boost gauge, battery pack charge level, and fuel gauges, among others. Noteworthy features also include drive mode indicators, gear position indicators, AT (Automatic Transmission) indicator, ALFP (Assisted Light Force Pedal) indicator, speedometer, clock, connected device notifications (Bluetooth®, mail, telephone), odometer, dual trip meters, current fuel consumption, average fuel consumption, coolant temperature, current electric consumption, average electric consumption, cruising range, EV cruising range, service reminder, and various indicators. An exclusive feature to Kawasaki's Hybrid Electric Vehicle (HEV) models, the e-state indicator vividly expresses the available drive modes — SPORT-HYBRID, ECO-HYBRID, and EV — providing riders with essential information about the operating mode of their motorcycle.

SMARTPHONE CONNECTIVITY

The Z7 Hybrid ABS embraces seamless connectivity with its integrated Bluetooth® technology built into the instrument panel, allowing riders to wirelessly connect their smartphones to the motorcycle. Leveraging the dedicated smartphone application, RIDEOLOGY THE APP MOTORCYCLE*, riders gain access to a range of instrument functions that significantly enhance the overall motorcycling experience. This innovative feature not only exemplifies the commitment to modern technology but also empowers riders with greater control and customization, fostering a more integrated and enjoyable riding experience through the convenience of smartphone connectivity.

Functions include:

- **Vehicle info:** information such as battery state of charge, odometer, maintenance schedule and more 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
- **Communication sharing:** rider profile, location and riding logs can be shared with other RIDOLOGY THE APP users, allowing riders to interact with other like-minded riders
- **Maintenance log:** maintenance history like oil changes, consumable parts replacement, and periodic inspections can be managed

KAWASAKI GENUINE ACCESSORIES

Riders can elevate their experience with both style and protection offered by Kawasaki Genuine Accessories (KGA) tailored for the Z7 Hybrid ABS. The list of accessories offered includes a tank pad, knee pad, scratch resistant film, USB Type-C, frame sliders, and front axle slider.

**RIDEOLOGY THE APP is not intended for use during vehicle operation. Only use RIDEOLOGY THE APP when the vehicle is not being operated and it is safe to do so.*

Disclaimers

**Strong hybrid systems combine an internal combustion engine (ICE) with an electric motor for powerful riding, and because of their large battery capacity they can run on electricity alone.*

**Mass production models (excluding scooters) from a major powersports manufacturer as of October 6, 2023, per Kawasaki Motors, Ltd. research.*

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Kawasaki Z7 Hybrid ABS

Color: Metallic Bright Silver/Metallic Matte

Lime Green/Ebony

MSRP: \$12,499

Availability: Now

To download high-resolution images, log on or register for the Kawasaki media site at <http://kawasakimedia.com>.

ABOUT KAWASAKI

Kawasaki started full-scale production of motorcycles over a half century ago. The first Kawasaki motorcycle engine was designed based on technical know-how garnered from the development and production of aircraft engines, and Kawasaki's entry into the motorcycle industry was driven by the company's constant effort to develop new technologies. Numerous new Kawasaki models introduced over the years have helped shape the market, and in the process have created enduring legends based on their unique engineering, power, design and riding pleasure. In the future, Kawasaki Motors, Ltd. is committed to maintaining and furthering these strengths which will surely give birth to new legends.

Kawasaki Motors Corp., U.S.A. markets and distributes Kawasaki motorcycles, ATVs, side x sides, and JET SKI® watercraft through a network of approximately 1,100 independent retailers, with close to an additional 7,700 retailers specializing in general purpose engines. Kawasaki and its affiliates employ nearly 3,100 people in the United States, with approximately 260 of them located at Kawasaki's Foothill Ranch, California headquarters.

Kawasaki's tagline, "Let the Good Times Roll.®", is recognized worldwide. The Kawasaki brand is synonymous with powerful, stylish and category-leading vehicles. Information about Kawasaki's complete line of powersports products and Kawasaki affiliates can be found on the Internet at www.kawasaki.com.